

Specific Purpose Survey of the United States Geological Survey Recorder Well G-968 in Miami-Dade County, Florida

Prepared for:

South Florida Water Management District

3301 Gun—Club Road West Palm Beach, Florida 33406 Ph. (561) 686-8800 (ext. 2978) Fax (561) 682-0066

Prepared by:

Mike Bartholomew, PSM, President Florida Professional Surveyor and Mapper License Number 5666 State of Florida

Biscayne Engineering Company, Inc. LB No 0129 529 West Flagler Street, Miami, FL. 33130 Tel (305) 324-7671

> Field Date: April 18, 2019 Report Date: May 7, 2019 BEC Order #: 03-86445

CORPORATE HEADQUARTERS 529 West Flagler Street, Miami, FL 33130 Tel. 305.324.7671 Fax 305.324.0809 INSPIRED BEYOND MEASURE • SINCE 1898

PALM BEACH BRANCH 449 NW 35th Street, Boca Raton, FL 33431 Tel. 561.603.2329 Fax 561.609.2317

www.BiscayneEngineering.com info@BiscayneEngineering.com

TABLE OF CONTENTS

Title	Page
Cover Sheet	1
Table of Contents	2
Purpose	3
Location of Project	3
Surveyor's Report	4
Project Datum's Leveling and GPS Methods Equipment used	4 4 4
Vertical Control Points	5&6
Benchmarks summary	5&6
Field Notes	6
Project Results	7
Surveyor's Notes	9
Surveyor's Certificate	10
SFWMD Site Form	11

PURPOSE

The purpose of this survey is to set an Elevation Reference Mark (Benchmark) consisting of a SFWMD aluminum disc in concrete and to establish a North American Vertical Datum of 1988 (NAVD 88) elevation on said Benchmark and on an additional Reference Point with a Brass plate, both at United States Geological Survey Well **G-968**.

LOCATION OF PROJECT

The United States Geological Survey's Recorder Well **G-968** is located in Section 9, Township 52 South, Range 39 East, Miami-Dade County, Florida.



General Location (Intended Display scale is "Not to Scale")

PROJECT VERTICAL DATUM

The project vertical datum is the North American Vertical Datum (NAVD) of 1988.

To convert the NAVD 88 elevation to the National Geodetic Vertical Datum of 1929 at station **G-968 add 1.54**'. These values are based on Corpscon 6.0.1 a US. 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 US. Army Corps of Engineers South Atlantic Division, Jacksonville Fl.

PROJECT HORIZONTAL DATUM

The project horizontal datum is the North American Datum 83 (NAD 83(2011)) (EPOCH:2010.0000).

LEVELING METHODS

The leveling for this project was performed in accordance with standard survey practice using conventional third order methods, techniques and equipment.

The allowable error (.05 \checkmark miles) on this project meets or exceeds third order closures as required by SFWMD for this project per executed SOW for 4600003705-WO04 and discussions with SFWMD.

A level loop was run from the NGS Benchmark control point B 503, PID AJ8355, through the well site, and to the same NGS Benchmark B 503. The measurements were collected using a Digital Level and were hand written in Biscayne Engineering Co, Inc. Field Book 2995 pages 16-17, dated April 01, 2019, reduced and adjusted electronically. Additional data was manually recorded in the field book.

GPS METHODS

Latitude and Longitude for Benchmark G-968 were established by observing a 3-minute session of GPS data on April 18, 2019, using a Trimble R-10 and The Florida Permanent Reference Network (FPRN). The FPRN network consists of nearly 100 Continuously Operating Reference Stations (CORS) located throughout Florida.

EQUIPMENT USED

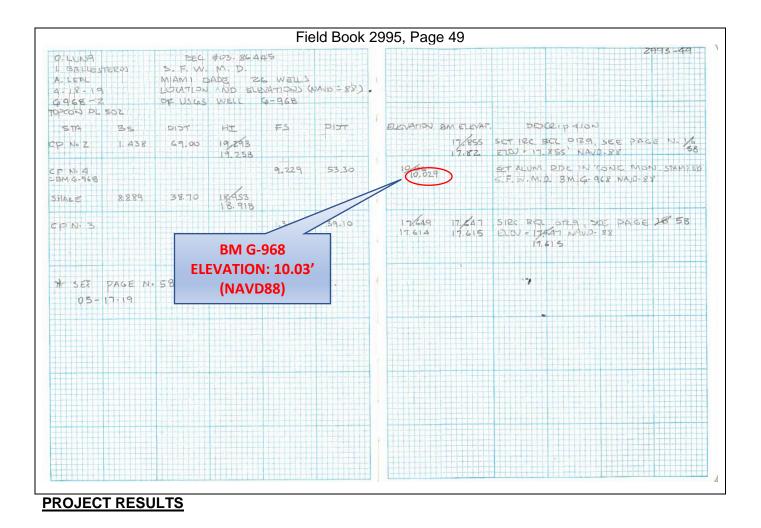
- Trimble GPS unit R-10, Serial Number 5625R066118.
- TOPCON DL-502 digital level Serial Number 512386 and a folding bar code rod.
- TOPCON Total Station ES 103, Serial Number ZQ000748.
- TOPCON Auto-level DL-502, Serial Number 512386.

VERTICAL CONTROL POINT

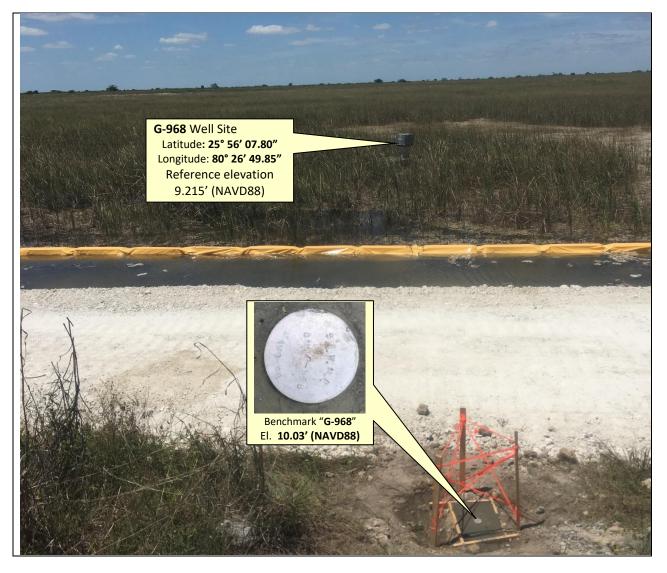
NGS BM B 503 25° 55' 59.00" (N) 80° 26' 56.00" (W) Published 17.47 ft. (NAVD88) Published 5.32 m THE MARK IS ABOUT 10.0 MI (16.1 KM) NORTHWEST OF HIALEAH, 24.0 MI (38.6 KM) NORTH-NORTHWEST OF MIAMI, 32.0 MI (51.5 KM) NORTH OF HOMESTEAD, IN SECTION 9, TOWNSHIP 52 SOUTH, RANGE 39 EAST. SURVEY DISK SET IN TOP OF CONCRETE MONUMENT STAMPING: B 503 2000 NGS BM C 503 25° 55' 18" (N) 80° 27' 32" (W) 18.03 ft. (NAVD88) Published 5.49 m Per NGS Datasheet SET IN TOP OF A ROUND CONCRETE MONUMENT RECESSED 0.4 FT BELOW THE LEVEL OF THE GROUND AND 0.6 FT BELOW THE LEVEL OF THE LEVEE ROAD. LOCATED 81.3 FT NORTHWEST OF A CARSONITE WITNESS POST, **19.7 FT SOUTHEAST OF A CARSONITE WITNESS** POST, 7.0 FT NORTHWEST OF THE APPROXIMATE CENTERLINE OF THE LEVEE ROAD.

The Vertical Control point utilized and set as part of this survey is the:

NAD_83(2011)(EPOCH:2010.0000)	11.57 ft.	(NGVD29)	3.53 m	Converted
			1.54 ft.	Corpscon
and the second s			(conversion factor)	6.0.1
A A A A A A A A A A A A A A A A A A A			ALUMINUM D	
and a second second	CONCRET	E (STAMPE	D "BM G-968")	
811-1-968 1-41/0-03	AVENUE V MILES NW TRAIL.THE	VITH DANEL /, AND 0.65 M	TION OF SW L LANE, DRIV MILES SW ON IARKER IS SE RAIL.	E 0.07 L-30/L-31



Overall Site



Looking Northwesterly (oblique not to scale)

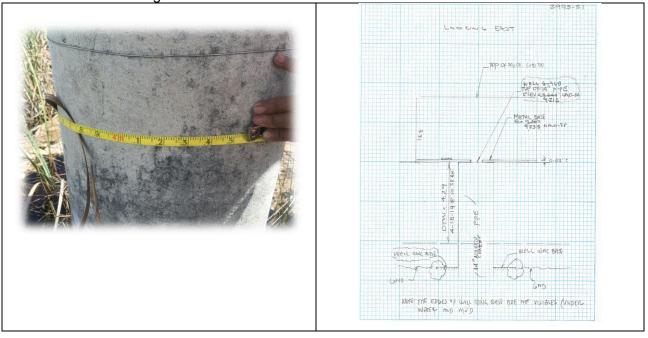
Tabular Form

Reference and	Ground Elevations	: NAVD88			
Well	Ground Elevation	Reference	e Elevation	Com	ments
G-968	3.5 ft.	9.215 ft.		Тор	of 14" CONCRETE PIPE
Offset to NGVD	29: +1.54' (See Proje	ect Vertical	Datum Note	s in Pa	age: 4)
Well diameter			Casing mat	erial	DTW
14"			METAL		4.29 ft (04/18/19 at 10:58 am)

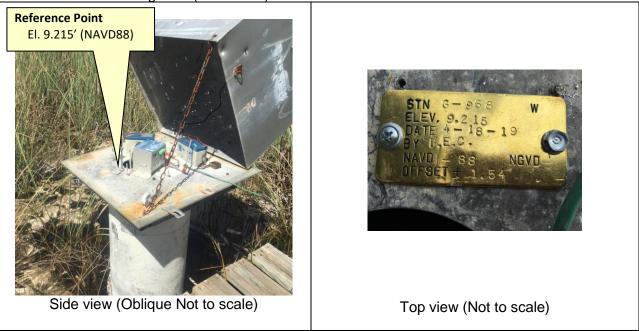
USGS Pub	lished: (Per USGS R	eport Site #: 25560008	0270001 G-968) Datum Not Reported
Well	Ground Elevation	Reference Elevation	Comments
G-968	-	10.87 ft.	Top of base

Source & Site	NAVD88	NGVD29 (Published)	NGVD29 (Corpscon)
Benchmark			
B 503 (NGS)	17.47 ft. (Published)		
C 503 (NGS)	18.03 ft. (Published)		
G-968 (SFWMD)	10.03 ft. (Measured)		11.60 ft. (Converted)

Well Photos and Diagrams



Well Photos and Diagrams (Continued)



Surveyor's Notes:

1. All measurements herein are in United States Survey feet and decimal thereof, unless otherwise specified.

2. Underground utilities were not located as part of this survey.

3. This survey report or copies thereof are not valid without the original signature and seal of a Florida licensed Surveyor and Mapper.

4. Additions or deletions to this survey report by other than the signing party (or parties) is prohibited without written consent of the signing party (or parties).

5. To convert from NAVD 88 to NGVD 29 add 1.54 feet. This value is based on 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.

6. Date of last field work: April 18, 2019, BEC job No. 03-86445.

7. SFWMD Data records (on file at the District's headquarters):

A. Electronic Data files:

Miscellaneous picture files

B. Conventional reporting Field Book: 2995 pages 16-17, 48-52

Abbreviations:

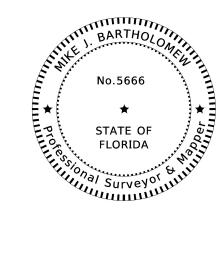
El	Elevation
DTW -	Distance to the water table inside the well
M-DC -	Miami-Dade County
NAVD88 -	North American Vertical Datum of 1988
NGVD29 -	National Geodetic Vertical Datum of 1929
NGS -	National Geodetic Survey
PSM -	Professional Surveyor & Mapper
PID -	Permanent Identifiers
SFWMD -	South Florida Water Management District
USGS -	United States Geological Survey

BEC - Biscayne Engineering Company, Inc.

SURVEYOR'S CERTIFICATION

In my professional opinion this Specific Purpose Survey meets applicable portions of the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code. This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable.

Last date of Survey April 18, 2019



Mike Bartholomew, PSM, President Florida Professional Surveyor and Mapper License Number 5666 State of Florida Biscayne Engineering Company, Inc. LB No 0129 529 West Flagler Street, Miami, FL. 33130 Tel (305) 324-7671



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

			Rev. 4/18
DESIGNATION: G-968		PROJECT: G-968	
ESTABLISHED BY: SOUTH FLORIDAN		SURVEYOR: Mike Bartholom DATE: 04/18/19	ew
RECOVERED BY: BISCAYNE ENG			
	GEOGRAPH		
SECTION 9	TOWNSHIP 52 SOUTH	RANGE 39 EAST	
COUNTY:MIAMI-DADE	NAME OF QUADRANG		
HORIZONTAL DATUM: 1927	(circle one) ZONE (E) or W	
VERTICAL DATUM: MSL 1929	(1988) 2022 Other	(circle one)	
VERTICAL ACCURACY: 1 2 3			
STATE PLANE COORDINATE	(N) Y= 582576.79	(E) X= 837917.41	NAVD 88 EL.10.03' NGVD 29 EL. 11.57'
CORPSCON 6.0.1 CONVERSION F Development Center Topographic Engineering Ce vertcon05.txt and vertcon05.05 files supplied by ACTUAL NGS or (ngvd29.txt file) OPUS Ortho Height	nter Alexandria, Virginia Windows	-based program to convert coordinates an	rs Engineering Research and d elevations between datum's using
LATITUDE: 25 ° 56' 07.26 " (N)	LONGITUDE: 80° 26'	49.02" (W) (Source) GPS R	TK (FPRN)
	RECOVE	RY DATA	
Stamping: S.F.W.M.D. BM G-968			
To Reach: FROM THE INTERSECT 0.65 MILES SW ON L-30/L-31 TRAI			
NOTABLE LAND MARKS: SW 177 ^{TI}			
NGS-SOURCE BENCHMARK: B 50	3		
FIELD BOOK PAGE <u>2995-49</u>	DICTI	URES	
		verall Site	
WELL 6968 G-968 Well Site Latitude: 25° 56' 07.80" Lorgitude: 80° 26' 49.85"	CP2 2	Benchmark "G-968" El. 10.03' (NAVD88)	
		NOT TO SCALE	(Google Earth product)



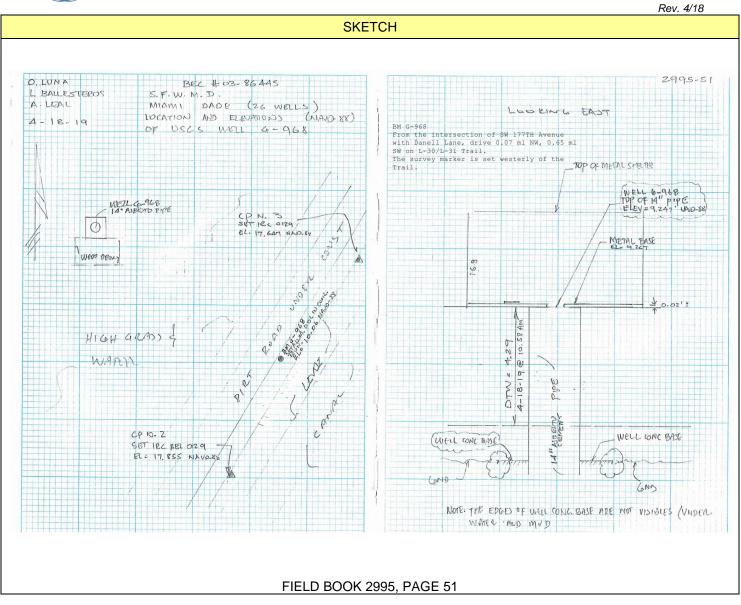
SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Looking Northwesterly (oblique not to scale)



SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Office

Project

13 May 2019

INPUT

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

OUTPUT

Geographic, NAD83 Vertical - NGVD29 (Vertcon94), U.S. Feet

BM G-968

Latitude: 25 56 07.26 Longitude: 80 26 49.02 Elevation/Z: 10.06 1/1 Latitude: 25 56 07.26000 Longitude: 80 26 49.02000 Elevation/Z: 11.599

Office

Project

13 May 2019

INPUT

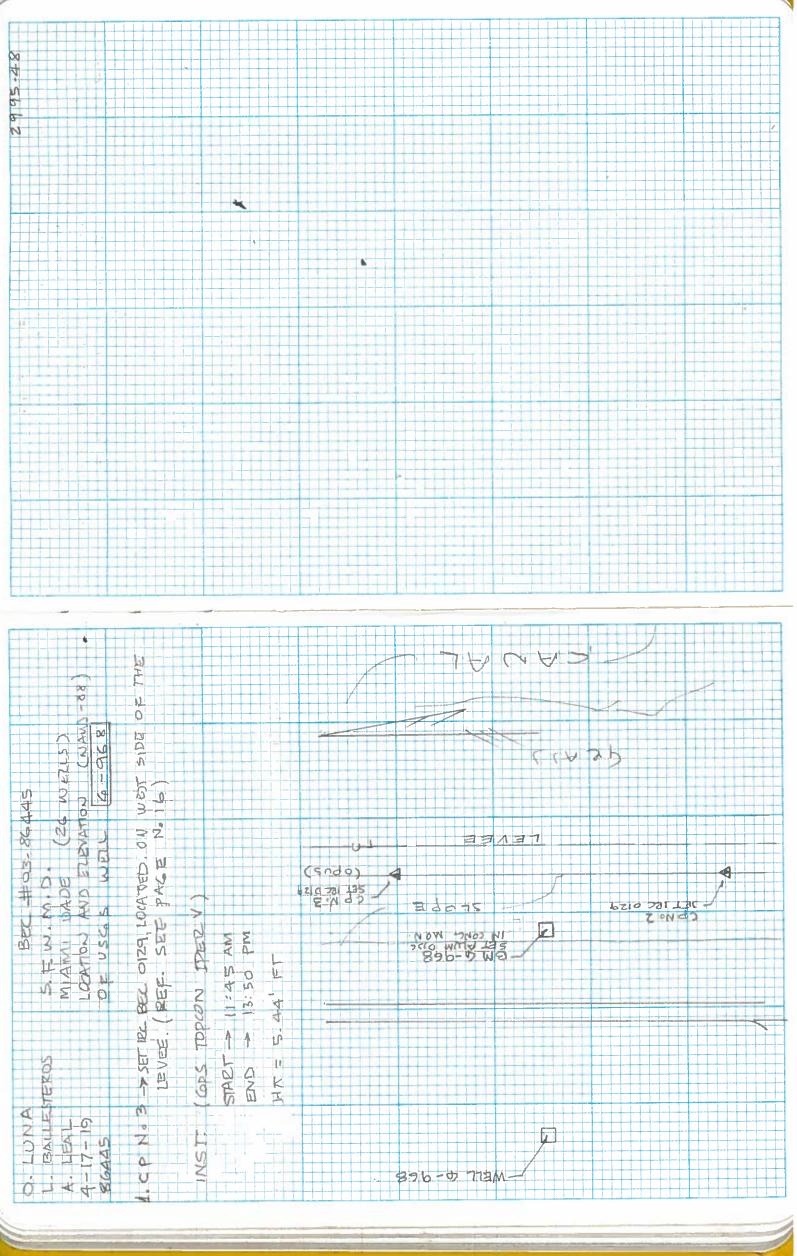
Geographic, NAD83 Vertical - NAVD88, U.S. Feet

OUTPUT

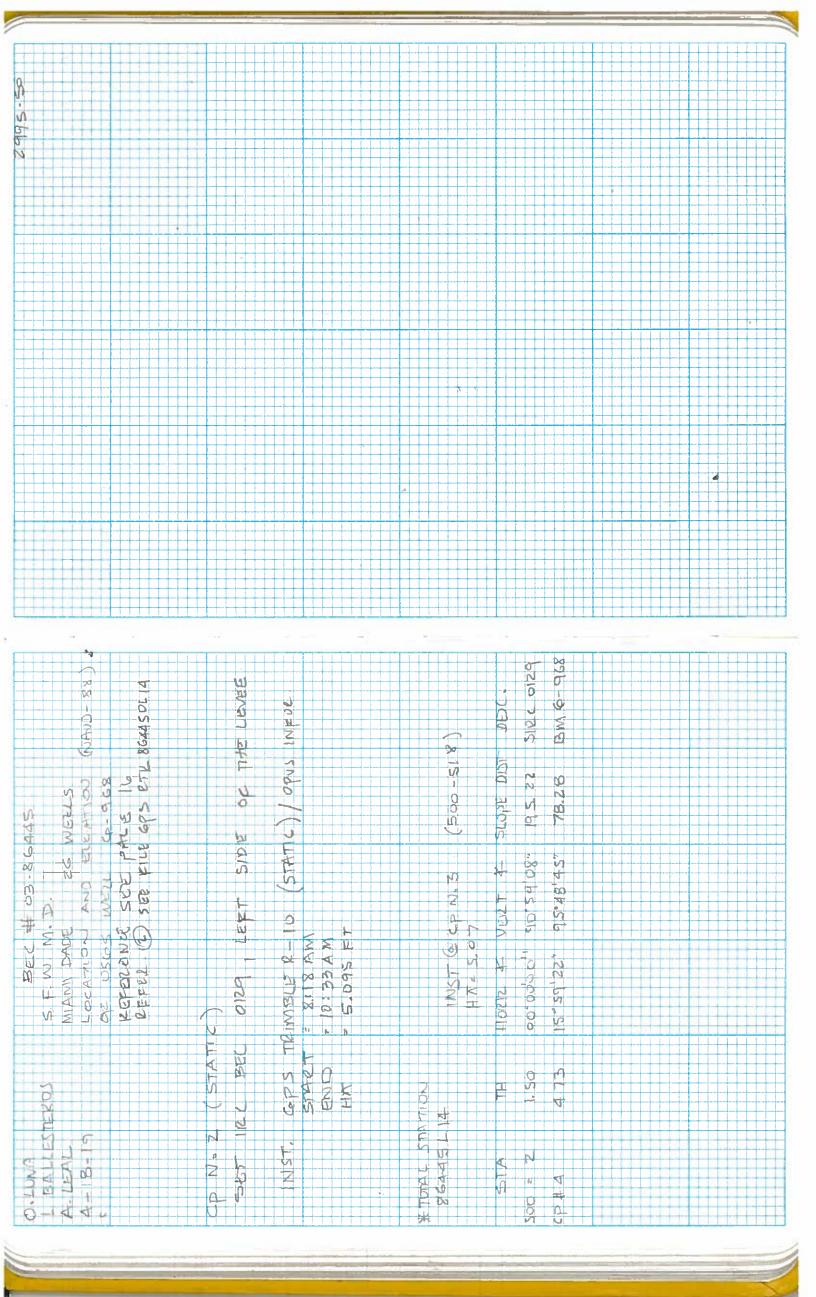
Geographic, NAD83 Vertical - NGVD29 (Vertcon94), U.S. Feet

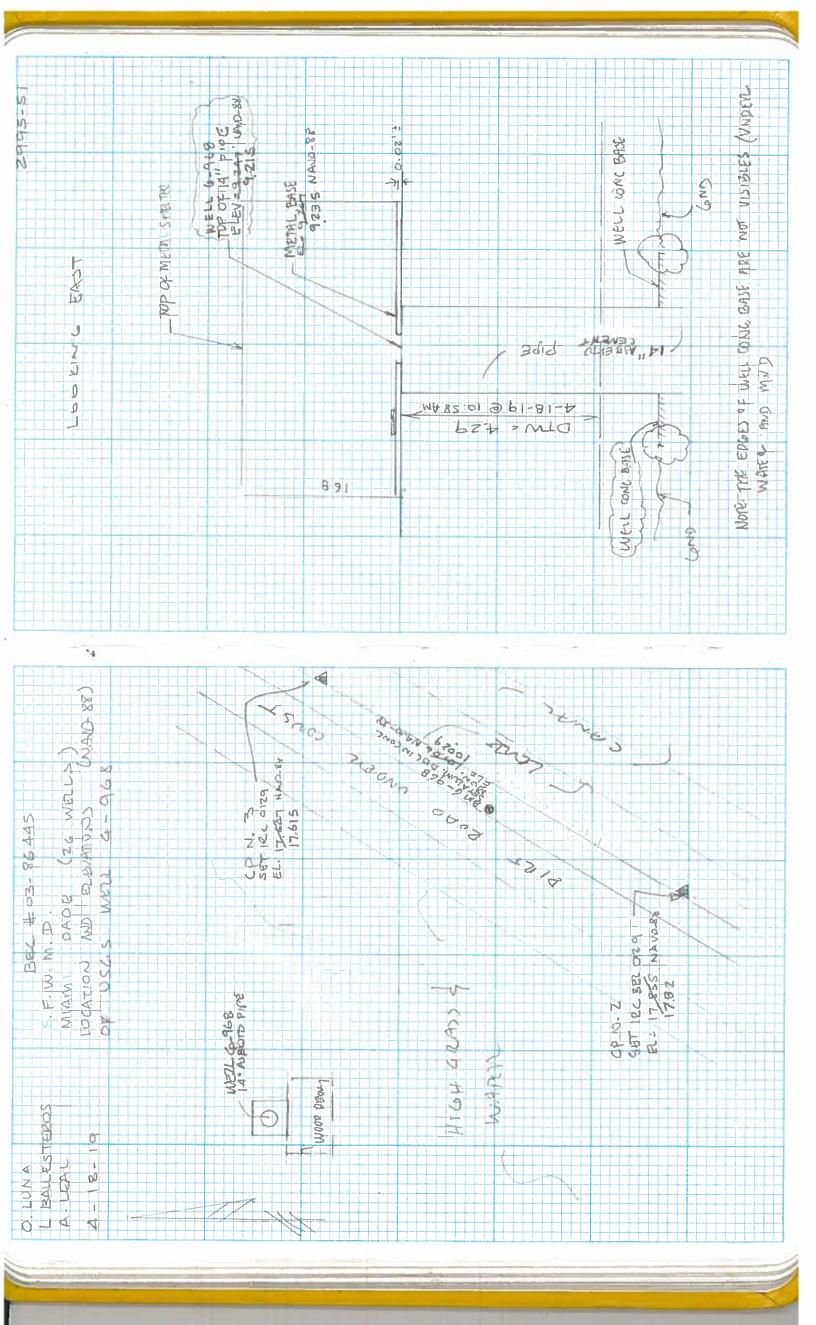
WELL G968

Latitude: 25 56 07.80 Longitude: 80 26 49.85 Elevation/Z: 9.25 1/1 Latitude: 25 56 07.80000 Longitude: 80 26 49.85000 Elevation/Z: 10.789

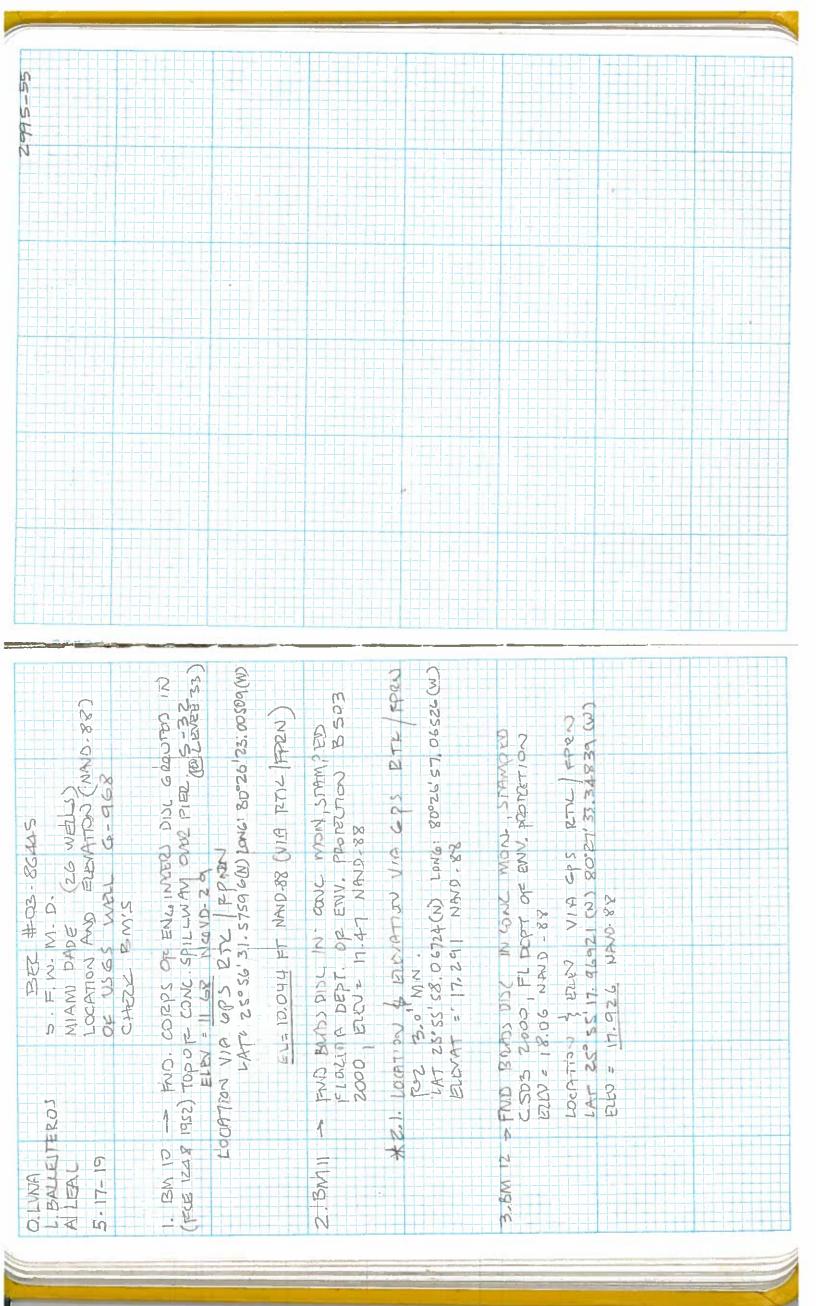


		a						+++-		++
	2 m		00							
		M								
	2		10							
	עו	2 >						+-++		
<mark>┥╴╎╴╎╴╎╴┥╸┥╴╎╶╴┨╺┿╸┼</mark> ╸	2 A C	NOW NOW								
	r.	R-DAN SUCO. VI								
	10 50	- <u>7</u>	à.							
	S E									
		9.5	1291 - 201 201 - 201 201 - 201							
	553		ġ							
	JNZ		a E							
	2 1	J X	24							
	2 Min		0.50						1.1.1.1	
	562 10 10 10 20 25 10 25		10 11 11 11 11 11 11 11 11 11 11 11 11 1		<u> </u>					
		ALUNA.						1		
	SCT 122	11		1						
	+3	1-11	a b							
	2 5	1 in	SIE							
							111			H
	2825		<u> </u>							
	DO 10		C P							
	BM ELEVAT.		17,615							
	A A							++++		_
		10/6629								
	Neuran	30	7.6149					++		
	A	29	20							
	6									
	G									
WELLS MELLS Pales Pales	S H	9.22 23.30 25.25 23.30	0. 	ELEVATION S.						
WELLS. MAND (MAND	<u>A</u>	622		ELEVATION						
D	<u>A</u>	622		ELEVATION						
D		622								
M. D. C. WELLS ADE TLE WELLS AND ELEVATIONS (WAND - WELL G-968	<u>A</u>			NEW EUEVATION						
M. D. C. WELLS.	TT 0 A S S S S S S S S S S S S S S S S S S	6 27 6 5 27 6 6 27 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6		NEW EUEVATION						
M. D. C. WELLS.	2020 11 10 10 10 10 10 10 10 10 10 10 10 10	6 27 6 5 27 6 6 27 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6		ELEVATION						
M. D. C. WELLS.	2020 11 10 10 10 10 10 10 10 10 10 10 10 10	6 27 6 5 27 6 6 27 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6		For NEW EVENATION						
M. D. C. WELLS.	<u>A</u>	622		For NEW EVENATION						
ADE CLEMENS WELLS	2020 11 10 10 10 10 10 10 10 10 10 10 10 10	6 27 6 5 27 6 6 27 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6		58 For NEW EVENATION						
M. D. C. WELLS.	PIT 1	622.0 816.81 01.82 810.81 01.82 816.81 01.82 816.81 01.82 816.81 01.82 816.81		58 For NEW EVENATION						
S. F. W. M. D. MIAMI DADZ ZE WELLS MIAMI DADZ ZE WELLS UNA VILO ATION AND ELENATIONS (WAND -	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	622.0 816.81 01.82 810.81 01.82 816.81 01.82 816.81 01.82 816.81 01.82 816.81		N. 58 FOR NEW EVENATION						
S. F. W. M. D. MIAMI DADZ ZE WELLS MIAMI DADZ ZE WELLS UNA VILO ATION AND ELENATIONS (WAND -	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	622.0 816.81 01.82 810.81 01.82 816.81 01.82 816.81 01.82 816.81 01.82 816.81		N. 58 FOR NEW EVENATION						
S. F. W. M. D. MIAMI DADZ ZE WELLS MIAMI DADZ ZE WELLS UNA VILO ATION AND ELENATIONS (WAND -	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 27 6 5 27 6 6 27 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6		N. 58 FOR NEW EVENATION						
TEROI S. F. W. M. D. D. MANIN DADE WELLS MIAMIN DADE ZA WELLS UDVATION AND ELUMATION & VAND	25 Dior 1. 438 69.00 19.263 850 19.263 850 19.263 850 19.263	622 0 828 2 0 22 0 82 0 810 0 810 810 0 810 0 800 0 800000000		PAGE N. 58 FOR NEW ELEVATION						
TEROI S. F. W. M. D. D. MANIN DADE WELLS MIAMIN DADE ZA WELLS UDVATION AND ELUMATION & VAND	25 Dior 1. 438 69.00 19.263 850 19.263 850 19.263 850 19.263	622 0 828 2 0 22 0 82 0 810 0 810 810 0 810 0 800 0 800000000		PAGE N. 58 FOR NEW EVENIN						
TEROI S. F. W. M. D. D. MANIN DADE WELLS MIAMIN DADE ZA WELLS UDVATION AND ELUMATION & VAND	25 Dior 1. 438 69.00 19.263 850 19.263 850 19.263 850 19.263	622 0 828 2 0 22 0 82 0 810 0 810 810 0 810 0 800 0 800000000		PAGE N. 58 FOR NEW EVENIN						
TREAT So F. W. M. D. D. MANIN DADE - WELLS MIAMIN DADE - 26 WELLS ULOWATION AND ELUMATION WALLS 202 - 968	25 Dior 1. 438 69.00 19.263 850 19.263 850 19.263 850 19.263	622 0 828 2 0 22 0 82 0 810 0 810 810 0 810 0 800 0 800000000		PAGE N. 58 FOR NEW ELEVATION						





N N				10.05° NAUD- X2		
2 1 1	20					
5	1.9 N					
	6210			MOM		
6	in	U		K K		
01 V 91 - 2-		aid		ALUM DISC IN CONT		
	5					a
DCD CD	5 - 1 G					
6 -1	0	20		SET ALUM		
	SZ	0		K X		
3	T.O.					
3	1-5-1-1-2			296		
A N		5232				
				h a		
		2 1 2 P		10.0		
A A A A A A A A A A A A A A A A A A A		<u> </u>				
MEWN.PX				T T		
A		<u> </u>				
				ALL D		
THE WEST		10. [45]				
	7261					
× A			222			
AND AND AND AND	29251		252.61			
AND - KG	298-6-1					1 1 1 1 2 2 2 2 2 2 2 2 3 2 2 2 4 2 2 2 2 5 2 2 2 2 6 2 2 2 2 7 2 2 2 2 7 2 2 2 2 7 2 2 2 2 8 2 2 2 2 9 2 2 2 2 10 2 2 2 2 10 2 2 2 2 10 2 2 2 2 10 2 2 2 2 10 2 2 2 2 10 2 2 2 2 10 2 2<
RANDA LAND LAND LAND LAND LAND LAND LAND			8		1 1	
W. POB-86	298-6-1		5 5 5			
S- FEI W. M. P. P. MIRM DAPE I OCANON DAPE MERN WEN	2742		5 5 5			
S. R. W. M. L MIRM DADE NOCH WOW DADE DADE DADE NOCH WEW	298-6-1		8			
RAN PAPE N. P. P. M. P. P. P. M. M. P.	2.075 1.745 1.45 1.45 1.45 1.45 1.95 2.42		10 £ 10 985 q. 985 9.460			
RAN PAPER W. M. P. P. M. M. P. P. M. M. P.	2.075 1.745 1.45 1.45 1.45 1.45 1.95 2.42		10 £ 10 985 q. 985 9.460			
S- FEI W. M. P. P. MIRM DAPE I OCANON DAPE MERN WEN	2.075 1.745 1.45 1.45 1.45 1.45 1.95 2.42		10 £ 10 985 q. 985 9.460			



AT 8 25 AT 8 35 AVD88 NAVD88 A 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	DIST USES W		MAN G-019 F-5 F-5 CNIAN	11	EIWEION EM ELV	V. PECCPTION FNO SUEVEN DISCIN GAR MONUNENT SAMPEN FLORIDO REPT. ENVIRONENT SAMPEN FLORIDO REPT. ENVIRONENT SET CUT NILE SOUTH FLORIDO REPT. SUDDI FLORIDO REPT. AND FLORIDO REPT. SET CUT NILE SOUTH FLORIDO REPT. SUDDI FLORIDO REPT. AND FLORIDO REPT. SET CUT NILE SOUTH FLORIDO REPT. SUDDI FLORIDO REPT. AND FLORI
×		n	2 00 5	252.62		1 503 64 FT NORTH OF NE LIVE
5,145	24 8.62 2	ଅ ୬ ୭	6 5 5 5		ž a	2:4 4 2:4 4 2:4 4 2:4 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
5 5 7 7	2 31.942		2%5	C)	288.21	25 W. M. M. S. H. M. THE & OH THE LEVER
4 945 2 45	7		50 57 50 50 50		17.853	SET CUT NLX TTY EL OR THE E OR THE GUEE = 492.109 ES NILLET PERSON THE TOWN 4

Bell # 02-86445 V. M. D. Value (26 WAILI) M.D. Ele MATION (10 M) CS WELL G-968 HI 22.798 22.7170 22.814 22.814 22.814 22.814 22.814 22.814 22.814 22.811 22.811 22.811 23.132 23.132 23.134 23.134	13-S-88-2	PIST ELEMATION BM WOLT DECE Prios	254.92 18.257 18.257 18.74 E & OF THE &		250.03 ' 17.702 SET WE NIT SET IN THE LEVEL.		ZG-07 17.527 SET WTNLS TT, ON & OF THE LEVEE,		ULT TON E OF THE		255-97 1 18. ps4 Set curve 77, on & of the level		252,82 11.565 SET CUT NLATTION & PR THE LEVER	
				22.989	2.482.2	22 <u>5</u> 8 6	5.059	22 814	5,34;0	22,170	5 17, 17, 17, 17,	23.13.6		23, 184
	TEIR 05	S D		4.732		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		5.28		S ZQF		120.2		0295
Ekos (86444/14 2.55 4.732 4.732 2.952 5.071 5.071 5.071	O LUNA L'BALLESTEROS A LEAL 5- 17- 19 21/1 LEWT (864	STA	T P N 6	SHAKE	TP N. 7	SHAKE	A - X	SHAKE	5 °N d1	SHALE	OIT'N AL	SHAKE	2	SHAKE

v v						<u>.</u>		8		CONC. MANCH	2 1					
2				Ŋ						- ANA	NON .					
				2 2 2		₩.		8 3		NC N						
	-			5 5		A A		ې ن ې 2 ک			A D					
	<u>ě</u>			5		5210		3 <u>5</u>			1					
	12			0							LOCAN B	J	3			
	- A C	Z CC-L		a 7a		- Jan		S F S		2 Levin		4		4		
		25		G N		5		1 SU		GINA	P 121004					
	36													- C	-0 -0	477
	ි ද ස									17.47						
	TITI			<u>s</u>		0		00152		PQ S			t			
	EUEVATION	17871		91/1		17.820		19.158 18.158		17.458			acuna			
	蒕											<u> </u>		¢.	4	
-	-		5						-							
	-	1 2		-	-			- 00-07-		14						
CSF-QN		248.82				22		253.48		41.000						
(STOLES)	TCID							25.27 25.27 26.27 26.27 27 27 27 27 27 27 27 27 27 27 27 27 2								
38	TC <u>i</u> O	5.314 248.32		5.114 239.94		506										
when you have a second				114				4.654 253.48								
way) Mrav	Ľ	5.314		114		506	E/8-7									
MO MO AND AND ELENATON		5.314	22.730	114	22.72.4	506	5/8/22									
MO C26 Way	T HIE FS	5.314	22	114		506										
de geades 0 (26 vays) Ano Erevenad Wei 6-968	Ľ	5.314	22	114	9. 87 22.72.4	506	253.54 22.8/3		Z.S.I. 40							
S. F. W. M. D MAM DAZ (26 WWY) LOCATION AND ELENATON DE USGS WELL 6-968	Diot HIE RS	Z 3/2 2.3/4	237,66 22	114	6	506	253.54		Z \$ 1. 9 D							
S. F. W. M. D MAM DAZ (26 WWY) LOCATION AND ELENATON DE USGS WELL 6-968	T HIE FS	5.314	37.66 22	114		506										
EEC # 53 86445 Ami DAZ (26 Ways) Ami DAZ (26 Ways) Ami DAZ (26 Ways) Ami DAZ (26 Ways)	Lass Durt Hit Rs Za 184	5.314	4 859 237,66 22		2. 60 50	cop. 4	4.992 253.54	4.654	4.641 ZS1.9D							

The NGS Data Sheet

See file dsdata.pdf for more information about the datasheet.

```
PROGRAM = datasheet95, VERSION = 8.12.5.2
        National Geodetic Survey, Retrieval Date = APRIL 1, 2019
1
AJ8355 *****
                            AJ8355
        DESIGNATION - B 503
                       AJ8355
AJ8355
        PTD
AJ8355 STATE/COUNTY-
                       FL/MIAMI-DADE
AJ8355 COUNTRY
                   - US
                    - PENNSUCO (1988)
AJ8355 USGS QUAD
AJ8355
AJ8355
                               *CURRENT SURVEY CONTROL
AJ8355
AJ8355* NAD 83(1986) POSITION- 25 55 59.
                                             (N) 080 26 56.
                                                                (W)
                                                                      SCALED
AJ8355* NAVD 88 ORTHO HEIGHT -
                                   5.324 (meters)
                                                        17.47 (feet) ADJUSTED
AJ8355
AJ8355 GEOID HEIGHT
                                 -24.833 (meters)
                                                                      GEOID12B
AJ8355 DYNAMIC HEIGHT -
                                   5.316 (meters)
                                                        17.44
                                                              (feet) COMP
AJ8355 MODELED GRAVITY -
                             979,041.4
                                         (mgal)
                                                                      NAVD 88
AJ8355
                                     CLASS II
AJ8355 VERT ORDER
                          FIRST
AJ8355
AJ8355. The horizontal coordinates were scaled from a topographic map and have
AJ8355.an estimated accuracy of +/- 6 seconds.
AJ8355.
AJ8355. The orthometric height was determined by differential leveling and
AJ8355.adjusted by the NATIONAL GEODETIC SURVEY
AJ8355.in June 2002.
AJ8355
AJ8355.Significant digits in the geoid height do not necessarily reflect accuracy.
AJ8355.GEOID12B height accuracy estimate available here.
AJ8355
AJ8355. The dynamic height is computed by dividing the NAVD 88
AJ8355.geopotential number by the normal gravity value computed on the
AJ8355.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AJ8355.degrees latitude (g = 980.6199 gals.).
AJ8355
AJ8355. The modeled gravity was interpolated from observed gravity values.
AJ8355
AJ8355;
                           North
                                                 Units Estimated Accuracy
                                         East
AJ8355; SPC FL E
                        177,320.
                                      255,210.
                                                       (+/- 180 meters Scaled)
                    -
                                                    MT
AJ8355
AJ8355_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ551683(NAD 83)
AJ8355
AJ8355
                                SUPERSEDED SURVEY CONTROL
AJ8355
AJ8355.No superseded survey control is available for this station.
AJ8355
AJ8355 MARKER: DD = SURVEY DISK
AJ8355_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AJ8355_STAMPING: B 503 2000
AJ8355 MARK LOGO: FLDEP
AJ8355 MAGNETIC: B = BAR MAGNET IMBEDDED IN MONUMENT
AJ8355 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AJ8355+STABILITY: SURFACE MOTION
AJ8355 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AJ8355+SATELLITE: SATELLITE OBSERVATIONS - August 31, 2005
AJ8355
```

https://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AJ8355

- Date Condition Report By AJ8355 HISTORY - 2000 MONUMENTED FLDEP AJ8355 HISTORY AJ8355 HISTORY - 20050831 GOOD WEIDEN AJ8355 STATION DESCRIPTION AJ8355 AJ8355 AJ8355'DESCRIBED BY FL DEPT OF ENV PRO 2000 (JLM) AJ8355'THE MARK IS ABOUT 10.0 MI (16.1 KM) NORTHWEST OF HIALEAH, 24.0 MI AJ8355'(38.6 KM) NORTH-NORTHWEST OF MIAMI, 32.0 MI (51.5 KM) NORTH OF AJ8355'HOMESTEAD, IN SECTION 9, TOWNSHIP 52 SOUTH, RANGE 39 EAST. TO REACH AJ8355'THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY 27 AND THE EASTBOUND AJ8355'LANES OF INTERSTATE 75 (ALLIGATOR ALLEY) NEAR ANDYTOWN, GO SOUTH ON AJ8355'U.S. HIGHWAY 27 FOR 13.4 MI (21.6 KM) TO THE JUNCTION OF STATE ROAD AJ8355'997 ON THE RIGHT, TURN RIGHT ON STATE ROAD 997 AND GO SOUTHWEST FOR AJ8355'0.8 MI (1.3 KM) TO THE NORTHEAST END OF A BRIDGE SPANNING MIAMI CANAL AJ8355'C-6 AND THE JUNCTION OF A LIME ROCK ROAD ON THE RIGHT, TURN RIGHT ON AJ8355'THE LIME ROCK ROAD AND GO WEST FOR 0.1 MI (0.2 KM) TO THE TOP OF A AJ8355'LEVEE (NO 30), TURN LEFT ON THE LEVEE ROAD AND GO SOUTHWEST FOR 0.1 AJ8355'MI (0.2 KM) TO A LOCKED GATE, CONTINUE SOUTHWEST ON THE LEVEE ROAD FOR AJ8355'0.8 MI (1.3 KM) TO THE MARK ON THE RIGHT, SET IN THE TOP OF A ROUND AJ8355'CONCRETE MONUMENT RECESSED 0.6 FT (18.3 CM) BELOW THE LEVEL OF THE AJ8355'GROUND AND BELOW THE LEVEL OF THE LEVEE ROAD. LOCATED 7.0 FT (2.1 M) AJ8355'NORTHWEST OF THE APPROXIMATE CENTERLINE OF THE LEVEE ROAD AND 0,7 FT AJ8355'(21.3 CM) SOUTHEAST OF A CARSONITE WITNESS POST. NOTE FOR KEY CONTACT AJ8355'SOUTH FLORIDA WATER MANAGEMENT DISTRICT AT 2195 NORTHEAST 8TH STREET AJ8355'HOMESTEAD, FL 33033, PHONE NUMBER 305-242-5955. NOTE A BAR MAGNET WAS AJ8355'IMBEDDED ON THE NORTH SIDE IN THE MONUMENT. AJ8355 AJ8355 STATION RECOVERY (2005) AJ8355 AJ8355'RECOVERY NOTE BY WEIDENER SURVEYING AND MAPPING 2005 AJ8355'RECOVERED IN GOOD CONDITION.

DATASHEETS

*** retrieval complete.
Elapsed Time = 00:00:04

4/1/2019

The NGS Data Sheet

See file <u>dsdata.pdf</u> for more information about the datasheet.

```
PROGRAM = datasheet95, VERSION = 8.12.5.3
1
        National Geodetic Survey, Retrieval Date = JULY 3, 2019
AJ8356 DESIGNATION - C 503
AJ8356 PID
                   - AJ8356
AJ8356 STATE/COUNTY- FL/MIAMI-DADE
AJ8356 COUNTRY
                      US
AJ8356 USGS QUAD
                    - PENNSUCO (1988)
AJ8356
                               *CURRENT SURVEY CONTROL
AJ8356
AJ8356
AJ8356* NAD 83(1986) POSITION- 25 55 18.
                                            (N) 080 27 32.
                                                               (W)
                                                                    SCALED
AJ8356* NAVD 88 ORTHO HEIGHT -
                                  5.505 (meters)
                                                       18.06
                                                              (feet) ADJUSTED
AJ8356
AJ8356 GEOID HEIGHT
                                 -24.813 (meters)
                                                                    GEOID12B
AJ8356 DYNAMIC HEIGHT
                                  5.496 (meters)
                                                       18.03 (feet) COMP
AJ8356 MODELED GRAVITY -
                            979,039.7
                                                                    NAVD 88
                                        (mgal)
AJ8356
AJ8356 VERT ORDER
                        - FIRST
                                    CLASS II
AJ8356
AJ8356. The horizontal coordinates were scaled from a topographic map and have
AJ8356.an estimated accuracy of +/- 6 seconds.
AJ8356.
AJ8356. The orthometric height was determined by differential leveling and
AJ8356.adjusted by the NATIONAL GEODETIC SURVEY
AJ8356.in June 2002.
AJ8356
AJ8356.Significant digits in the geoid height do not necessarily reflect accuracy.
AJ8356.GEOID12B height accuracy estimate available here.
AJ8356
AJ8356. The dynamic height is computed by dividing the NAVD 88
AJ8356.geopotential number by the normal gravity value computed on the
AJ8356.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AJ8356.degrees latitude (g = 980.6199 gals.).
AJ8356
AJ8356. The modeled gravity was interpolated from observed gravity values.
AJ8356
AJ8356;
                          North
                                        East
                                                Units Estimated Accuracy
AJ8356;SPC FL E
                        176,050.
                                     254,210.
                                                   MT (+/- 180 meters Scaled)
                    -
AJ8356
AJ8356 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ541671(NAD 83)
AJ8356
                               SUPERSEDED SURVEY CONTROL
AJ8356
AJ8356
AJ8356.No superseded survey control is available for this station.
AJ8356
AJ8356 MARKER: DD = SURVEY DISK
AJ8356 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AJ8356_STAMPING: C 503 2000
```

AJ8356 MARK LOGO: FLDEP AJ8356 MAGNETIC: B = BAR MAGNET IMBEDDED IN MONUMENT AJ8356 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO AJ8356+STABILITY: SURFACE MOTION AJ8356_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR AJ8356+SATELLITE: SATELLITE OBSERVATIONS - August 31, 2005 AJ8356 - Date Cond: - 2000 MONUM - 20050831 GOOD AJ8356 HISTORY Condition Report By AJ8356 HISTORY MONUMENTED FLDEP AJ8356 HISTORY WEIDEN AJ8356 STATION DESCRIPTION AJ8356 AJ8356 AJ8356'DESCRIBED BY FL DEPT OF ENV PRO 2000 (JLM) AJ8356'THE MARK IS ABOUT 10.5 MI (16.9 KM) NORTHWEST OF HIALEAH, 24.0 MI AJ8356'(38.6 KM) NORTH-NORTHWEST OF MIAMI, 31.0 MI (49.9 KM) NORTH OF AJ8356'HOMESTEAD, IN SECTION 17, TOWNSHIP 52 SOUTH, RANGE 39 EAST. TO REACH AJ8356'THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY 27 AND THE EASTBOUND AJ8356'LANES OF INTERSTATE 75 (ALLIGATOR ALLEY) NEAR ANDYTOWN, GO SOUTH ON AJ8356'U.S. HIGHWAY 27 FOR 13.4 MI (21.6 KM) TO THE JUNCTION OF STATE ROAD AJ8356'997 ON THE RIGHT, TURN RIGHT ON STATE ROAD 997 AND GO SOUTHWEST FOR AJ8356'0.8 MI (1.3 KM) TO THE NORTHEAST END OF A BRIDGE SPANNING MIAMI CANAL AJ8356'(CANAL C-6) AND THE JUNCTION OF A LIME ROCK ROAD ON THE RIGHT, TURN AJ8356'RIGHT ON LIME ROCK ROAD AND GO WEST FOR 0.1 MI (0.2 KM) TO THE TOP OF AJ8356'A LEVEE (NO 30), TURN LEFT ON THE LEVEE ROAD AND GO SOUTHWEST FOR 0.1 AJ8356'MI (0.2 KM) TO A LOCKED GATE, CONTINUE SOUTHWEST ON LEVEE ROAD FOR 1.8 AJ8356'MI (2.9 KM) TO THE MARK ON THE RIGHT, SET IN TOP OF A ROUND CONCRETE AJ8356'MONUMENT RECESSED 0.4 FT (12.2 CM) BELOW THE LEVEL OF THE GROUND AND AJ8356'0.6 FT (18.3 CM) BELOW THE LEVEL OF THE LEVEE ROAD. LOCATED 81.3 FT AJ8356'(24.8 M) NORTHWEST OF A CARSONITE WITNESS POST, 19.7 FT (6.0 M) AJ8356'SOUTHEAST OF A CARSONITE WITNESS POST, 7.0 FT (2.1 M) NORTHWEST OF THE AJ8356'APPROXIMATE CENTERLINE OF THE LEVEE ROAD. NOTE FOR KEY CONTACT SOUTH AJ8356'FLORIDA WATER MANAGEMENT DISTRICT AT 2195 NORTHEAST 8TH STREET AJ8356'HOMESTEAD, FL 33033, PHONE NUMBER 305-242-5955. NOTE A BAR MAGNET WAS AJ8356'IMBEDDED ON THE NORTH SIDE IN THE MONUMENT. AJ8356 AJ8356 STATION RECOVERY (2005) AJ8356 AJ8356'RECOVERY NOTE BY WEIDENER SURVEYING AND MAPPING 2005 AJ8356'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:04