

**HORIZONTAL & VERTICAL CONTROL  
(GPS) PROJECT  
FOR THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
IN PALM BEACH COUNTY**

**PROJECT NAME: CONSERVATION AREA 2A, PART 2**

**PROJECT REPORT  
JUNE 21, 1998**

**BY: SIM SMITH**

filename: sfwmd2a

## **INTRODUCTION**

In February 1998, the Florida Department of Environmental Protection, Division of State Lands, Bureau of Survey and Mapping (BSM), was contracted by the South Florida Water Management District (SFWMD) to provide professional land survey services for the purpose of establishing horizontal and vertical control in the vicinity of the Everglades know as Conservation Area 2A which is located several miles northwest of Fort Lauderdale, Florida.

### **Submitting Agency:**

Florida Department of Environmental Protection  
Division of State Lands  
Bureau of Survey and Mapping  
3900 Commonwealth Blvd.,M.S. 105  
Tallahassee, Florida 32399  
Contact: Sim Smith  
Email: simsmith@nettally.com  
PH: 850/488-2427

### **Client:**

South Florida Water Management District  
P.O. Box V  
3301 Gun Club Road  
West Palm Beach, Florida 33402  
Contact: Howard Ehmke

## **SCOPE OF SURVEY**

The scope of this project is to establish nine (9) benchmarks in the everglades using GPS within Conservation Area 2A. This project will be split into two parts. Part 1 will consist of establishing horizontal control around Conservation Area 2A with GPS. Part 2 will consist of establishing nine (9) benchmarks within Conservation Area 2A with GPS.

## **SPECIAL CONDITIONS**

This project was adjusted with NGS's adjustment software called "ADJUST". The procedures for using this software are outlined in a document titled "**Least Squares Adjustment Procedures for Horizontal Control Networks Established With Global Positioning Systems Using National Geodetic Survey's Software**" by Sim Smith and Ronnie Taylor. See Attached document. The file naming convention as outlined in this document was used for this project.

I was unable to get program "chkdesc.exe" to run. Therefore, I was unable to obtain a check from this program for the description file. Files DES.HA and DES.LST were checked by Ronnie Taylor and Randy Wegner who are NGS employees.

## **MONUMENTATION**

Part 2 of this project consisted of existing monumentation for C 467, FLGPS 69, FCE 2079, V 463, OTTER, G410 X, FCE 3929, AND H 467. New monuments were created for WCA 2159, WCA 2F1, WCA 2E1, WCA 2RT, WCA 2F4, WCA 2E4, WCA 2U3, WCA 230 AND WCA 2U1. These monuments consist of a stainless steel rod driven to refusal without a logo cap. The rod then extends upward approximately five feet from the floor of the Everglades to a T or square shaped dock. Each dock has several water leveling devices. The rod is encased in a 5" PVC pipe that extends from the floor of the everglades to the level of the dock and does not have a cap.

## **PROJECT FACTS:**

**Horizontal Classification:** First-order

**Horizontal Datum:** NAD 83(1990)

**Vertical Datum :** NAVD 88

**Locality:** Palm Beach County, Florida

**Project Name:** South Florida Water Management District Water  
Conservation Area 2A, Part 2

**Geoid:** GEOID 96

**Ellipsoid:** GRS 80

**Acc. No.:** GPS???? (Will be assigned by NGS)

**Date of Field Work :** April 1998**Chief of Party:** Sim Smith

**Date of Computation:** June

**Total Number of Stations:** 17

New Stations - 9

Old Stations - 8 ( all were fixed)

**Occupation time:** 1 hour & 30 minutes

**Equipment:**

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Unit No. 1 (001)	Ashtech Z-12, P/N 700845-3(D), S/N LP01920 Ashtech L1-L2 Mar Antenna, P/N 700700(B), S/N MA13270
Unit No. 2 (002)	Ashtech Z-12, P/N 700845-3(D), S/N LP01913 Ashtech L1-L2 Mar Antenna, P/N 700700(B), S/N MA13278
Unit No. 3 (003)	Ashtech Z-12, P/N 700845-3(D), S/N LP01927 Ashtech L1-L2 Mar Antenna, P/N 700700(B), S/N MA13271
Unit No. 4 (004)	Ashtech Z-12, P/N 700845-3(D), S/N LP01941 Ashtech L1-L2 Mar Antenna, P/N 700700(B), S/N MA13267

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**Height of Fixed Height Antenna:**

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	# 001	# 002	# 003	# 004
height of pole	1.9976 m	1.9980 m	1.9983 m	1.9979 m
from pole to antenna bottom	0.0100 m	0.0100 m	0.0100 m	0.0100 m
from phase center to bottom of antenna	0.0419 m	0.0419 m	0.0419 m	0.0419 m
total height of antenna	2.0495 m	2.0499 m	2.0502 m	2.0498 m

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**Software:** The software used for processing this data and for creating the “B” and “G” file was Ashtech AOS, Version 1.

**Sessions:**

Date	Session	Occupied Points (ssn #s)
4/14/1998	104A	0002, 0005, 0016
4/15/1998	105A	0002, 0016, 0017, 0020
	105B	0017, 0018, 0020, 0021
	105C	0005, 0006, 0017, 0018
4/16/1998	106A	0019, 0020, 0022, 0023
	106B	0020, 0022, 0023, 0024
	106C	0010, 0020, 0021, 0024
	106D	0006, 0010, 0018, 0021
4/17/1998	107A	0008, 0009, 0023, 0024
	107B	0004, 0008, 0019, 0023
	107C	0003, 0004, 0016, 0019
4/18/1998	108A	0002, 0003, 0016
6/16/1998	167A	0020, 0022, 0023, 0024
	167B	0005, 0006, 0017, 0018

### Stations Occupied:

Vert Acc	SSN	Sta. Name	PID #	Hor Acc
FIRST, C2	0002	C 467	AE7229	FIRST
FIRST, C2	0003	FLGPS 69	AD7903	B
FIRST, C2	0004	FCE 2079	AD8128	FIRST
FIRST, C2	0005	V 463	AE7217	FIRST
FIRST, C2	0006	OTTER	AD7241	FIRST
FIRST, C2	0008	G 410 X	AD8121	FIRST
FIRST, C2	0009	FCE 3929	AE7174	FIRST
FIRST, C2	0010	H 467	AE7192	FIRST
	0016	WCA 2159		GPS DERIVED

0017	WCA 2F1	"
0018	WCA 2E1	"
0019	WCA 2RT	"
0020	WCA 2F4	"
0021	WCA 2E4	"
0022	WCA 2U3	"
0023	WCA 230	"
0024	WCA 2U1	"

### GPS Observation Summary

Total Observing Days = 6  
 Total Observing Sessions = 14  
 Total Stations Occupied = 16  
 New Horizontal Stations = 9  
 Old Horizontal Stations = 8  
 Number of Stations With Single Occupations = 1  
 Number of Stations With Double Occupations = 6  
 Number of Stations With Triple Occupations = 3  
 Number of Stations With Quadruple Occupations = 5  
 Number of Stations With More Than Four Occupations = 1  
 Total Vectors = 78  
 Total Rejected Vectors = 0

**Free Horizontal Adjustment:** (see file "FREE.FR1")

Horizontal Position Held Fixed:

Station Name - FLGPS 69  
SSN # 0003  
Lat - 26 24 13.26696, Long - 080 29 30.40965  
Ellipsoid Height -19.25 m

Variance of Unit Weight - 149.33  
Degrees of freedom - 186

**Free Horizontal Adjustment after scaling by program "MODGEE":**  
(see file "free.fr2")

Station Name - FLGPS 69  
SSN # 0003  
Lat - 26 24 13.26696, Long - 080 29 30.40965  
Ellipsoid Height -19.25 m

Variance of Unit Weight - 1.02  
Degrees of freedom - 186

**Compare positions from the unscaled and scaled unconstrained horizontal adjustment:**

See file "CLUST1"

**See results of program "LOOP":** (see file "LOOP.OUT"):

See attached sketch



**Constrained Horizontal Adjustment:** (see file "FIXH.FX3)

Constraints:

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LONG	SSN	NAME	PID	LAT
	EL	HGT		
55.56125	080 26	0002 C 467 29.48879	AE7229	26 27
		-19.52		
13.26696	080 29	0003 FLGPS 69 30.40965	AD7903	26 24
		-19.25		
07.92095	080 32	0004 FCE 2079 13.13710	AD8128	26 20
		-20.20		
36.83816	080 22	0005 V 463 16.77700	AE7217	26 22
		-19.19		
22.08141	080 17	0006 OTTER 50.48806	AD7241	26 21
		-21.26		
13.34319	080 28	0008 G 410 X 29.47788	AD8121	26 15
		-21.41		
57.52305	080 24	0009 FCE 3929 45.24552	AE7174	26 12
		-19.70		
47.62265	080 17	0010 H467 52.86135	AE7192	26 13
		-21.66		

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Variance of Unit Weight - 4.81  
Degrees of freedom - 207

**Unconstrained vertical adjustment:** (see file "FREE.FR4")

Horizontal Position Held Fixed:

Station Name - FLGPS 69  
SSN # 0003  
Lat - 26 24 13.26696, Long - 080 29 30.40965  
Ortho Height 5.799 m

Variance of Unit Weight - 1.02  
Degrees of freedom - 186

**Constrained vertical adjustment:** (see file "FIX.FX5")

Station Name - FLGPS 69  
SSN # 0003  
Lat - 26 24 13.26696, Long - 080 29 30.40965  
Ortho Height 5.799 m

Variance of Unit Weight - 1.27  
Degrees of freedom - 193

## FIXED VALUES

PUB	PUB ORTHO	SSN	NAME
PID	HEIGHT		
AE7229	5.628 M	0002	C 467
AD7903	5.799 M	0003	FLGPS 69
AD8128	4.753 M	0004	FCE 2079
AE7217	6.002 M	0005	V 463
AD7241	4.117 M	0006	OTTER
AD8121	3.550 M	0008	G 410 X
AE7174	5.327 M	0009	FCE 3929
AE7192	3.589 M	0010	H 467

### ADJUSTMENT FOR SUBMITTAL

The following files are stored on CD A. The naming convention for these files are described on page 23 of the document labeled **“Using National Least Squares Adjustment Procedures for Horizontal Control Networks Established With**

**Global Positioning Systems Geodetic Survey's Software**” by Sim Smith and Ronnie Taylor.

- \*\*\*\*\*** - All of the raw data files
- DES.HA** - NGS binary files for the descriptions
- DES.LST** - NGS text files for descriptions
- GFILEIN.FR1** - Beginning G file
- GFILE.SCA** - Scaled G file
- BFILEIN.FR1** - Beginning B file
- ADJOS** - Final adjusted position file

**FINBFILE** - Final B file fro program ELEVUP

**REPORT.DOC** - WORD 6.0 of report

**REPORT.TXT** - ASCII file of report

**Paper copies of the following files are enclosed:**

**SHORT1** - Output from program OBSCHK (checks raw file)

**SHORT2** - Output from NEWCHKOBS (checks raw file)

**FREE.FR1** - Listing from a free adjustment with ellipsoidal heights

**FREE.FR2** - Listing from a free adjustment with ellipsoidal heights after scaling

**CLUST1** - Comparison of positions in FREE.FR1 and FREE.FR2

**LOOPOUT** - Output from program LOOP

**FIXH.FX3** - Listing from a constrained horizontal adjustment

**FREE.FR4** - Listing from a free vertical adjustment

**FIXV.FX5** - Listing from a constrained vertical adjustment

**FINBFILE** - Output from ELEVUP

**FREEHACC.FR6** - Output from a free horizontal adjustment with accuracies

**ELLACC.OUT** - Output from program ELLAC with vertical accuracies

**SHORT3** - Output from program OBSDES

**SHORT4** - Output from program NEWCHKOBS

**OBSDES.OUT** - Output from program OBSDES

**DES.LST** - Discriptions

**REPORT** - Project Report



# The NGS Data Sheet

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

```

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.16
1 National Geodetic Survey, Retrieval Date = APRIL 20, 2005
AG9868 *****
AG9868 HT_MOD - This is a Height Modernization Survey Station.
AG9868 DESIGNATION - WCA 2159
AG9868 PID - AG9868
AG9868 STATE/COUNTY- FL/PALM BEACH
AG9868 USGS QUAD - WEST OF BIG LAKE (1990)
AG9868
AG9868 *CURRENT SURVEY CONTROL
AG9868
AG9868* NAD 83(1999)- 26 22 46.82670(N) 080 26 43.22798(W) ADJUSTED
AG9868* NAVD 88 - 4.66 (meters) 15.3 (feet) GPS OBS
AG9868
AG9868 X - 949,078.529 (meters) COMP
AG9868 Y - -5,638,421.040 (meters) COMP
AG9868 Z - 2,816,798.757 (meters) COMP
AG9868 LAPLACE CORR- -1.54 (seconds) DEFLEC99
AG9868 ELLIP HEIGHT- -20.44 (meters) (05/31/01) GPS OBS
AG9868 GEOID HEIGHT- -25.08 (meters) GEOID03
AG9868
AG9868 HORZ ORDER - FIRST
AG9868 ELLP ORDER - FOURTH CLASS I
AG9868
AG9868.The horizontal coordinates were established by GPS observations
AG9868.and adjusted by the National Geodetic Survey in May 2001.
AG9868
AG9868.The orthometric height was determined by GPS observations and a
AG9868.high-resolution geoid model using precise GPS observation and
AG9868.processing techniques.
AG9868
AG9868.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9868
AG9868.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9868
AG9868.The ellipsoidal height was determined by GPS observations
AG9868.and is referenced to NAD 83.
AG9868
AG9868.The geoid height was determined by GEOID03.
AG9868
AG9868; North East Units Scale Factor Converg.
AG9868;SPC FL E - 226,795.847 255,348.731 MT 0.99997899 +0 14 47.2
AG9868;UTM 17 - 2,917,850.447 555,329.847 MT 0.99963780 +0 14 47.2
AG9868
AG9868! - Elev Factor x Scale Factor = Combined Factor
AG9868!SPC FL E - 1.00000321 x 0.99997899 = 0.99998220
AG9868!UTM 17 - 1.00000321 x 0.99963780 = 0.99964101
AG9868
AG9868 SUPERSEDED SURVEY CONTROL
AG9868
AG9868 NAD 83(1990)- 26 22 46.82503(N) 080 26 43.22717(W) AD( ) 1
AG9868 ELLIP H (08/11/98) -20.42 (m) GP( ) 3 1
AG9868
AG9868.Superseded values are not recommended for survey control.
AG9868.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9868.See file dsdata.txt to determine how the superseded data were derived.
AG9868
AG9868_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK5533017850(NAD 83)
AG9868_MARKER: I = METAL ROD
AG9868_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9868_MARK LOGO: FLDEP
AG9868_PROJECTION: PROJECTING 61 CENTIMETERS
AG9868_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9868_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9868_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9868+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9868_ROD/PIPE-DEPTH: 7.1 meters
AG9868
AG9868 HISTORY - Date Condition Report By

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AG9868 HISTORY - 1998 MONUMENTED FLDEP

AG9868

AG9868

## STATION DESCRIPTION

AG9868

AG9868 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9868 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9868 CONSERVATION AREA NUMBER 2, IN ESTIMATED SECTION 9, TOWNSHIP 47 SOUTH,

AG9868 RANGE 38 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR HELICOPTER.

AG9868 TO REACH THE STATION FROM THE SAWGRASS EXPRESSWAY OVERPASS AND

AG9868 JUNCTION OF U.S. HIGHWAY 441 (STATE ROAD 7) IN PARKLAND, GO NORTH ON

AG9868 U.S. HIGHWAY 441 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO THE JUNCTION

AG9868 OF STATE ROAD 827 (LOXAHATCHEE ROAD) ON THE LEFT, JUST SOUTH OF THE

AG9868 BROWARD-PALM BEACH COUNTY LINE, TURN LEFT ON STATE ROAD 827

AG9868 (LOXAHATCHEE ROAD) AND GO NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO THE

AG9868 END OF THE PAVEMENT AND STATE ROAD 827 AND THE ENTRANCE TO THE

AG9868 LOXAHATCHEE NATIONAL WILDLIFE REFUGE, CONTINUE AHEAD ON THE GRAVEL

AG9868 ROAD FOR 0.05 MI (0.08 KM) TO THE TOP OF THE LEVEE AND THE

AG9868 INTERSECTION OF THE NORTH-SOUTH LEVEE L-36 ROAD, TURN LEFT ON THE

AG9868 LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO THE BOAT RAMP ON THE

AG9868 RIGHT, NOW BY AIRBOAT GO NORTHWESTERLY FOR ABOUT 9.3 MI (15.0 KM)

AG9868 LATITUDE 26 22 46.8 LONGITUDE 080 26 43.2 TO A 4.0 FT (1.2 M) BY 8.0

AG9868 FT (2.4 M) WOODEN PLATFORM AND THE STATION, A STAINLESS STEEL ROD

AG9868 DRIVEN TO REFUSAL AT A DEPTH OF 23.4 FT (7.1 M) SURROUNDED BY A 5-INCH

AG9868 PVC PIPE, THE DATUM POINT IS RECESSED 0.25 FT (7.62 CM) BELOW THE TOP

AG9868 OF THE PVC PIPE. NOTE THE PVC PIPE IS ABOUT 8.0 FT (2.4 M) LONG AND

AG9868 WAS DRIVEN INTO THE MUCK AND ATTACHED TO THE PLATFORM AT THE TOP, THE

AG9868 PVC PIPE WAS NOT BACKFILLED. LOCATED 5.3 FT (1.6 M) EAST-SOUTHEAST OF

AG9868 THE NORTHWEST CORNER OF THE PLATFORM, 3.3 FT (1.0 M) NORTHWEST OF THE

AG9868 NORTHWEST SIDE OF A 1.2 FT (0.4 M) DIAMETER WELL PIPE FOR A WATER GAGE

AG9868 BOX AND 2.0 FT (0.6 M) WEST-SOUTHWEST OF THE SOUTHEAST LEG OF THE

AG9868 WOODEN LADDER. NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER MANAGEMENT

AG9868 DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00



# The NGS Data Sheet

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

```

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.16
1 National Geodetic Survey, Retrieval Date = APRIL 20, 2005
AG9875 *****
AG9875 HT_MOD - This is a Height Modernization Survey Station.
AG9875 DESIGNATION - WCA 230
AG9875 PID - AG9875
AG9875 STATE/COUNTY- FL/BROWARD
AG9875 USGS QUAD - ANDYTOWN (1983)
AG9875
AG9875 *CURRENT SURVEY CONTROL
AG9875
AG9875* NAD 83(1999)- 26 14 45.37724(N) 080 24 29.20494(W) ADJUSTED
AG9875* NAVD 88 - 3.71 (meters) 12.2 (feet) GPS OBS
AG9875
AG9875 X - 953,836.231 (meters) COMP
AG9875 Y - -5,644,278.463 (meters) COMP
AG9875 Z - 2,803,516.640 (meters) COMP
AG9875 LAPLACE CORR- -1.81 (seconds) DEFLEC99
AG9875 ELLIP HEIGHT- -21.36 (meters) (05/31/01) GPS OBS
AG9875 GEOID HEIGHT- -25.06 (meters) GEOID03
AG9875
AG9875 HORZ ORDER - FIRST
AG9875 ELLP ORDER - FOURTH CLASS I
AG9875
AG9875.The horizontal coordinates were established by GPS observations
AG9875.and adjusted by the National Geodetic Survey in May 2001.
AG9875
AG9875.The orthometric height was determined by GPS observations and a
AG9875.high-resolution geoid model using precise GPS observation and
AG9875.processing techniques.
AG9875
AG9875.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9875
AG9875.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9875
AG9875.The ellipsoidal height was determined by GPS observations
AG9875.and is referenced to NAD 83.
AG9875
AG9875.The geoid height was determined by GEOID03.
AG9875
AG9875;
AG9875;SPC FL E - North East Units Scale Factor Converg.
AG9875;UTM 17 - 2,903,055.419 559,111.483 MT 0.99964314 +0 15 42.3
AG9875
AG9875! - Elev Factor x Scale Factor = Combined Factor
AG9875!SPC FL E - 1.00000336 x 0.99998433 = 0.99998769
AG9875!UTM 17 - 1.00000336 x 0.99964314 = 0.99964649
AG9875
AG9875 SUPERSEDED SURVEY CONTROL
AG9875
AG9875 NAD 83(1990)- 26 14 45.37529(N) 080 24 29.20422(W) AD( ) 1
AG9875 ELLIP H (08/11/98) -21.35 (m) GP( ) 3 1
AG9875
AG9875.Superseded values are not recommended for survey control.
AG9875.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9875.See file dsdata.txt to determine how the superseded data were derived.
AG9875
AG9875_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK5911103055(NAD 83)
AG9875_MARKER: I = METAL ROD
AG9875_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9875_MARK LOGO: FLDEP
AG9875_PROJECTION: PROJECTING 61 CENTIMETERS
AG9875_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9875_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9875_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9875+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9875_ROD/PIPE-DEPTH: 5.7 meters
AG9875
AG9875 HISTORY - Date Condition Report By

```

AG9875 HISTORY - 1998 MONUMENTED FLDEP

AG9875

AG9875

## STATION DESCRIPTION

AG9875

AG9875 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9875 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9875 CONSERVATION AREA NUMBER 2, IN SECTION 25, TOWNSHIP 48 SOUTH, RANGE 39

AG9875 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR HELICOPTER. TO REACH

AG9875 THE STATION FROM THE SAWGRASS EXPRESSWAY OVERPASS AND JUNCTION OF U.S.

AG9875 HIGHWAY 441 (STATE ROAD 7) IN PARKLAND, GO NORTH ON U.S. HIGHWAY 441

AG9875 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO THE JUNCTION OF STATE ROAD 827

AG9875 (LOXAHATCHEE ROAD) ON THE LEFT, JUST SOUTH OF THE BROWARD-PALM BEACH

AG9875 COUNTY LINE, TURN LEFT ON STATE ROAD 827 (LOXAHATCHEE ROAD) AND GO

AG9875 NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO THE END OF THE PAVEMENT AND

AG9875 STATE ROAD 827 AND THE ENTRANCE TO THE LOXAHATCHEE NATIONAL WILDLIFE

AG9875 REFUGE, CONTINUE AHEAD ON THE GRAVEL ROAD FOR 0.05 MI (0.08 KM) TO THE

AG9875 TOP OF THE LEVEE AND THE INTERSECTION OF THE NORTH-SOUTH LEVEE L-36

AG9875 ROAD, TURN LEFT ON THE LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO

AG9875 THE BOAT RAMP ON THE RIGHT, NOW BY AIRBOAT GO WEST-SOUTHWESTERLY FOR

AG9875 ABOUT 10.0 MI (16.1 KM) LATITUDE 26 14 45.4 LONGITUDE 080 24 29.2 TO A

AG9875 5.0 FT (1.5 M) BY 4.0 FT (1.2 M) WOODEN PLATFORM AND THE STATION, A

AG9875 STAINLESS STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF 18.8 FT (5.7 M)

AG9875 SURROUNDED BY A 5-INCH PVC PIPE, THE DATUM POINT IS RECESSED 0.1 FT

AG9875 (3.0 CM) BELOW THE TOP OF THE PVC PIPE. NOTE THE PVC PIPE IS ABOUT

AG9875 8.0 FT (2.4 M) LONG AND WAS DRIVEN INTO THE MUCK AND ATTACHED TO THE

AG9875 PLATFORM AT THE TOP, THE PVC PIPE WAS NOT BACKFILLED. LOCATED 3.6 FT

AG9875 (1.1 M) WEST OF THE WEST SIDE OF A 1.2 FT (0.4 M) DIAMETER WELL PIPE

AG9875 FOR A WATER GAGE BOX, 2.8 FT (0.9 M) SOUTHEAST OF THE NORTHWEST CORNER

AG9875 OF THE PLATFORM AND 2.3 FT (0.7 M) NORTHEAST OF THE SOUTHWEST CORNER

AG9875 OF THE PLATFORM. NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER

AG9875 MANAGEMENT DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00

## The NGS Data Sheet

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

```

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9870 *****
AG9870 HT_MOD - This is a Height Modernization Survey Station.
AG9870 DESIGNATION - WCA 2E1
AG9870 PID - AG9870
AG9870 STATE/COUNTY- FL/PALM BEACH
AG9870 USGS QUAD - CORAL SPRINGS NE (1983)
AG9870
AG9870 *CURRENT SURVEY CONTROL
AG9870
AG9870* NAD 83(1999)- 26 21 05.65211(N) 080 21 14.22694(W) ADJUSTED
AG9870* NAVD 88 - 4.12 (meters) 13.5 (feet) GPS OBS
AG9870
AG9870 X - 958,302.441 (meters) COMP
AG9870 Y - -5,638,262.710 (meters) COMP
AG9870 Z - 2,814,008.616 (meters) COMP
AG9870 LAPLACE CORR- -2.11 (seconds) DEFLEC99
AG9870 ELLIP HEIGHT- -21.11 (meters) (05/31/01) GPS OBS
AG9870 GEOID HEIGHT- -25.23 (meters) GEOID03
AG9870
AG9870 HORZ ORDER - FIRST
AG9870 ELLP ORDER - FOURTH CLASS I
AG9870
AG9870.The horizontal coordinates were established by GPS observations
AG9870.and adjusted by the National Geodetic Survey in May 2001.
AG9870
AG9870.The orthometric height was determined by GPS observations and a
AG9870.high-resolution geoid model using precise GPS observation and
AG9870.processing techniques.
AG9870
AG9870.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9870
AG9870.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9870
AG9870.The ellipsoidal height was determined by GPS observations
AG9870.and is referenced to NAD 83.
AG9870
AG9870.The geoid height was determined by GEOID03.
AG9870
AG9870;
AG9870;SPC FL E - North East Units Scale Factor Converg.
AG9870;UTM 17 - 2,914,780.268 564,462.155 MT 0.99999250 +0 17 12.4
AG9870
AG9870! - Elev Factor x Scale Factor = Combined Factor
AG9870!SPC FL E - 1.00000332 x 0.99999250 = 0.99999582
AG9870!UTM 17 - 1.00000332 x 0.99965130 = 0.99965462
AG9870
AG9870 SUPERSEDED SURVEY CONTROL
AG9870
AG9870 NAD 83(1990)- 26 21 05.65042(N) 080 21 14.22571(W) AD( ) 1
AG9870 ELLIP H (08/11/98) -21.10 (m) GP( ) 3 1
AG9870
AG9870.Superseded values are not recommended for survey control.
AG9870.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9870.See file dsdata.txt to determine how the superseded data were derived.
AG9870
AG9870_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK6446214780(NAD 83)
AG9870_MARKER: I = METAL ROD
AG9870_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9870_MARK LOGO: FLDEP
AG9870_PROJECTION: PROJECTING 61 CENTIMETERS
AG9870_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9870_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9870_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9870+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9870_ROD/PIPE-DEPTH: 7.0 meters
AG9870
AG9870 HISTORY - Date Condition Report By

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AG9870 HISTORY - 1998 MONUMENTED FLDEP

AG9870

AG9870

## STATION DESCRIPTION

AG9870

AG9870 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9870 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9870 CONSERVATION AREA NUMBER 2, IN ESTIMATED SECTION 21, TOWNSHIP 47

AG9870 SOUTH, RANGE 40 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR

AG9870 HELICOPTER. TO REACH THE STATION FROM THE SAWGRASS EXPRESSWAY

AG9870 OVERPASS AND JUNCTION OF U.S. HIGHWAY 441 (STATE ROAD 7) IN PARKLAND,

AG9870 GO NORTH ON U.S. HIGHWAY 441 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO

AG9870 THE JUNCTION OF STATE ROAD 827 (LOXAHATCHEE ROAD) ON THE LEFT, JUST

AG9870 SOUTH OF THE BROWARD-PALM BEACH COUNTY LINE, TURN LEFT ON STATE ROAD

AG9870 827 (LOXAHATCHEE ROAD) AND GO NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO

AG9870 THE END OF THE PAVEMENT AND STATE ROAD 827 AND THE ENTRANCE TO THE

AG9870 LOXAHATCHEE NATIONAL WILDLIFE REFUGE, CONTINUE AHEAD ON THE GRAVEL

AG9870 ROAD FOR 0.05 MI (0.08 KM) TO THE TOP OF THE LEVEE AND THE

AG9870 INTERSECTION OF THE NORTH-SOUTH LEVEE L-36 ROAD, TURN LEFT ON THE

AG9870 LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO THE BOAT RAMP ON THE

AG9870 RIGHT, NOW BY AIRBOAT GO WESTERLY FOR ABOUT 3.5 MI (5.6 KM) LATITUDE

AG9870 26 21 05.6 LONGITUDE 080 21 14.2 TO A WOODEN T-SHAPED PLATFORM, 30.7

AG9870 FT (9.4 M) BY 1.9 FT (0.6 M) NORTH-SOUTH AND 6.0 FT (1.8 M) BY 1.9 FT

AG9870 (0.6 M) EAST-WEST WOODEN PLATFORM AND THE STATION SET IN THE SOUTHEAST

AG9870 CORNER OF THE T-SHAPED PLATFORM, A STAINLESS STEEL ROD DRIVEN TO

AG9870 REFUSAL AT A DEPTH OF 22.9 FT (7.0 M) SURROUNDED BY A 5-INCH PVC PIPE,

AG9870 THE DATUM POINT IS RECESSED 0.3 FT (9.1 CM) BELOW THE TOP OF THE PVC

AG9870 PIPE. NOTE THE PVC PIPE IS ABOUT 8.0 FT (2.4 M) LONG AND WAS DRIVEN

AG9870 INTO THE MUCK AND ATTACHED TO THE PLATFORM AT THE TOP, THE PVC PIPE

AG9870 WAS NOT BACKFILLED. LOCATED 6.0 FT (1.8 M) NORTH-NORTHWEST OF THE

AG9870 SOUTHWEST CORNER OF THE SOUTH END OF THE PLATFORM, 5.0 FT (1.5 M)

AG9870 EAST-SOUTHEAST OF THE SOUTHWEST CORNER OF THE PLATFORM AND 1.5 FT (0.5

AG9870 M) SOUTHWEST OF THE SOUTHEAST INSIDE CORNER OF THE T-SHAPED PLATFORM.

AG9870 NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER MANAGEMENT DISTRICT (561)

AG9870 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00

# The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9873 *****
AG9873 HT_MOD - This is a Height Modernization Survey Station.
AG9873 DESIGNATION - WCA 2E4
AG9873 PID - AG9873
AG9873 STATE/COUNTY- FL/BROWARD
AG9873 USGS QUAD - CORAL SPRINGS NE (1983)
AG9873
AG9873 *CURRENT SURVEY CONTROL
AG9873
AG9873* NAD 83(1999)- 26 18 32.37967(N) 080 21 25.18370(W) ADJUSTED
AG9873* NAVD 88 - 3.92 (meters) 12.9 (feet) GPS OBS
AG9873
AG9873 X - 958,353.376 (meters) COMP
AG9873 Y - -5,640,376.121 (meters) COMP
AG9873 Z - 2,809,780.848 (meters) COMP
AG9873 LAPLACE CORR- -2.11 (seconds) DEFLEC99
AG9873 ELLIP HEIGHT- -21.29 (meters) (05/31/01) GPS OBS
AG9873 GEOID HEIGHT- -25.20 (meters) GEOID03
AG9873
AG9873 HORZ ORDER - FIRST
AG9873 ELLP ORDER - FOURTH CLASS I
AG9873
AG9873.The horizontal coordinates were established by GPS observations
AG9873.and adjusted by the National Geodetic Survey in May 2001.
AG9873
AG9873.The orthometric height was determined by GPS observations and a
AG9873.high-resolution geoid model using precise GPS observation and
AG9873.processing techniques.
AG9873
AG9873.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9873
AG9873.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9873
AG9873.The ellipsoidal height was determined by GPS observations
AG9873.and is referenced to NAD 83.
AG9873
AG9873.The geoid height was determined by GEOID03.
AG9873
AG9873;
AG9873;SPC FL E - North East Units Scale Factor Converg.
AG9873;UTM 17 - 2,910,063.367 564,181.938 MT 0.99999205 +0 17 06.0
AG9873
AG9873! - Elev Factor x Scale Factor = Combined Factor
AG9873!SPC FL E - 1.00000334 x 0.99999205 = 0.99999539
AG9873!UTM 17 - 1.00000334 x 0.99965086 = 0.99965420
AG9873
AG9873 SUPERSEDED SURVEY CONTROL
AG9873
AG9873 NAD 83(1990)- 26 18 32.37788(N) 080 21 25.18260(W) AD( ) 1
AG9873 ELLIP H (08/11/98) -21.27 (m) GP( ) 3 1
AG9873
AG9873.Superseded values are not recommended for survey control.
AG9873.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9873.See file dsdata.txt to determine how the superseded data were derived.
AG9873
AG9873_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK6418210063(NAD 83)
AG9873_MARKER: I = METAL ROD
AG9873_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9873_MARK LOGO: FLDEP
AG9873_PROJECTION: PROJECTING 61 CENTIMETERS
AG9873_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9873_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9873_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9873+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9873_ROD/PIPE-DEPTH: 6.9 meters
AG9873
AG9873 HISTORY - Date Condition Report By

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## DATASHEETS

AG9873 HISTORY - 1998 MONUMENTED FLDEP

AG9873

AG9873

## STATION DESCRIPTION

AG9873

AG9873 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9873 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9873 CONSERVATION AREA NUMBER 2, IN ESTIMATED SECTION 4, TOWNSHIP 48 SOUTH,

AG9873 RANGE 40 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR HELICOPTER.

AG9873 TO REACH THE STATION FROM THE SAWGRASS EXPRESSWAY OVERPASS AND

AG9873 JUNCTION OF U.S. HIGHWAY 441 (STATE ROAD 7) IN PARKLAND, GO NORTH ON

AG9873 U.S. HIGHWAY 441 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO THE JUNCTION

AG9873 OF STATE ROAD 827 (LOXAHATCHEE ROAD) ON THE LEFT, JUST SOUTH OF THE

AG9873 BROWARD-PALM BEACH COUNTY LINE, TURN LEFT ON STATE ROAD 827

AG9873 (LOXAHATCHEE ROAD) AND GO NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO THE

AG9873 END OF THE PAVEMENT AND STATE ROAD 827 AND THE ENTRANCE TO THE

AG9873 LOXAHATCHEE NATIONAL WILDLIFE REFUGE, CONTINUE AHEAD ON THE GRAVEL

AG9873 ROAD FOR 0.05 MI (0.08 KM) TO THE TOP OF THE LEVEE AND THE

AG9873 INTERSECTION OF THE NORTH-SOUTH LEVEE L-36 ROAD, TURN LEFT ON THE

AG9873 LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO THE BOAT RAMP ON THE

AG9873 RIGHT, NOW BY AIRBOAT GO SOUTHWESTERLY FOR ABOUT 4.7 MI (7.6 KM)

AG9873 LATITUDE 26 18 32.4 LONGITUDE 080 21 25.2 TO A WOODEN T-SHAPED

AG9873 PLATFORM, 30.8 FT (9.4 M) BY 2.0 FT (0.6 M) NORTH-SOUTH AND 5.0 FT

AG9873 (1.5 M) BY 5.0 FT (1.5 M) EAST-WEST WOODEN PLATFORM AND THE STATION

AG9873 SET IN THE SOUTHEAST CORNER OF THE T-SHAPED PLATFORM, A STAINLESS

AG9873 STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF 22.7 FT (6.9 M) SURROUNDED

AG9873 BY A 5-INCH PVC PIPE, THE DATUM POINT IS RECESSED 0.3 FT (9.1 CM)

AG9873 BELOW THE TOP OF THE PVC PIPE. NOTE THE PVC PIPE IS ABOUT 8.0 FT (2.4

AG9873 M) LONG AND WAS DRIVEN INTO THE MUCK AND ATTACHED TO THE PLATFORM AT

AG9873 THE TOP, THE PVC PIPE WAS NOT BACKFILLED. LOCATED 5.1 FT (1.6 M)

AG9873 NORTH-NORTHWEST OF THE SOUTHWEST CORNER OF THE SOUTH END OF THE

AG9873 PLATFORM, 5.0 FT (1.5 M) SOUTHEAST OF THE NORTHWEST CORNER AND 1.2 FT

AG9873 (0.4 M) SOUTHWEST OF THE SOUTHEAST INSIDE CORNER OF THE T-SHAPED

AG9873 PLATFORM. NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER MANAGEMENT

AG9873 DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00

# The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9869 *****
AG9869 HT_MOD - This is a Height Modernization Survey Station.
AG9869 DESIGNATION - WCA 2F1
AG9869 PID - AG9869
AG9869 STATE/COUNTY- FL/PALM BEACH
AG9869 USGS QUAD - CORAL SPRINGS NE (1983)
AG9869
AG9869 *CURRENT SURVEY CONTROL
AG9869
AG9869* NAD 83(1999)- 26 21 39.28886(N) 080 22 09.73386(W) ADJUSTED
AG9869* NAVD 88 - 4.16 (meters) 13.6 (feet) GPS OBS
AG9869
AG9869 X - 956,708.242 (meters) COMP
AG9869 Y - -5,638,067.333 (meters) COMP
AG9869 Z - 2,814,936.230 (meters) COMP
AG9869 LAPLACE CORR- -2.01 (seconds) DEFLEC99
AG9869 ELLIP HEIGHT- -21.06 (meters) (05/31/01) GPS OBS
AG9869 GEOID HEIGHT- -25.20 (meters) GEOID03
AG9869
AG9869 HORZ ORDER - FIRST
AG9869 ELLP ORDER - FOURTH CLASS I
AG9869
AG9869.The horizontal coordinates were established by GPS observations
AG9869.and adjusted by the National Geodetic Survey in May 2001.
AG9869
AG9869.The orthometric height was determined by GPS observations and a
AG9869.high-resolution geoid model using precise GPS observation and
AG9869.processing techniques.
AG9869
AG9869.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9869
AG9869.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9869
AG9869.The ellipsoidal height was determined by GPS observations
AG9869.and is referenced to NAD 83.
AG9869
AG9869.The geoid height was determined by GEOID03.
AG9869
AG9869; North East Units Scale Factor Converg.
AG9869;SPC FL E - 224,752.190 262,940.081 MT 0.99999007 +0 16 48.1
AG9869;UTM 17 - 2,915,807.487 562,918.606 MT 0.99964888 +0 16 48.1
AG9869
AG9869! - Elev Factor x Scale Factor = Combined Factor
AG9869!SPC FL E - 1.00000331 x 0.99999007 = 0.99999338
AG9869!UTM 17 - 1.00000331 x 0.99964888 = 0.99965219
AG9869
AG9869 SUPERSEDED SURVEY CONTROL
AG9869
AG9869 NAD 83(1990)- 26 21 39.28716(N) 080 22 09.73284(W) AD( ) 1
AG9869 ELLIP H (08/11/98) -21.04 (m) GP( ) 3 1
AG9869
AG9869.Superseded values are not recommended for survey control.
AG9869.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9869.See file dsdata.txt to determine how the superseded data were derived.
AG9869
AG9869_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK6291915807(NAD 83)
AG9869_MARKER: I = METAL ROD
AG9869_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9869_MARK LOGO: FLDEP
AG9869_PROJECTION: PROJECTING 61 CENTIMETERS
AG9869_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9869_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9869_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9869+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9869_ROD/PIPE-DEPTH: 5.7 meters
AG9869
AG9869 HISTORY - Date Condition Report By

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AG9869 HISTORY - 1998 MONUMENTED FLDEP

AG9869

AG9869

## STATION DESCRIPTION

AG9869

AG9869 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9869 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9869 CONSERVATION AREA NUMBER 2, IN ESTIMATED SECTION 20, TOWNSHIP 47

AG9869 SOUTH, RANGE 40 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR

AG9869 HELICOPTER. TO REACH THE STATION FROM THE SAWGRASS EXPRESSWAY

AG9869 OVERPASS AND JUNCTION OF U.S. HIGHWAY 441 (STATE ROAD 7) IN PARKLAND,

AG9869 GO NORTH ON U.S. HIGHWAY 441 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO

AG9869 THE JUNCTION OF STATE ROAD 827 (LOXAHATCHEE ROAD) ON THE LEFT, JUST

AG9869 SOUTH OF THE BROWARD-PALM BEACH COUNTY LINE, TURN LEFT ON STATE ROAD

AG9869 827 (LOXAHATCHEE ROAD) AND GO NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO

AG9869 THE END OF THE PAVEMENT AND STATE ROAD 827 AND THE ENTRANCE TO THE

AG9869 LOXAHATCHEE NATIONAL WILDLIFE REFUGE, CONTINUE AHEAD ON THE GRAVEL

AG9869 ROAD FOR 0.05 MI (0.08 KM) TO THE TOP OF THE LEVEE AND THE

AG9869 INTERSECTION OF THE NORTH-SOUTH LEVEE L-36 ROAD, TURN LEFT ON THE

AG9869 LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO THE BOAT RAMP ON THE

AG9869 RIGHT, NOW BY AIRBOAT GO WEST-NORTHWESTERLY FOR ABOUT 4.5 MI (7.2 KM)

AG9869 LATITUDE 26 21 39.3 LONGITUDE 080 22 09.7 TO A WOODEN T-SHAPED

AG9869 PLATFORM, 30.0 FT (9.1 M) BY 2.0 FT (0.6 M) NORTH-SOUTH AND 6.0 FT

AG9869 (1.8 M) BY 2.0 FT (0.6 M) EAST-WEST WOODEN PLATFORM AND THE STATION, A

AG9869 STAINLESS STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF 18.7 FT (5.7 M)

AG9869 SURROUNDED BY A 5-INCH PVC PIPE, THE DATUM POINT IS RECESSED 0.25 FT

AG9869 (7.62 CM) BELOW THE TOP OF THE PVC PIPE. NOTE THE PVC PIPE IS ABOUT

AG9869 8.0 FT (2.4 M) LONG AND WAS DRIVEN INTO THE MUCK AND ATTACHED TO THE

AG9869 PLATFORM AT THE TOP, THE PVC PIPE WAS NOT BACKFILLED. LOCATED 5.0 FT

AG9869 (1.5 M) NORTHWEST OF THE SOUTHWEST END OF THE WOODEN PLATFORM AND 1.5

AG9869 FT (0.5 M) SOUTHWEST OF THE SOUTHEAST INSIDE CORNER OF THE T-SHAPED

AG9869 PLATFORM. NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER MANAGEMENT

AG9869 DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9872 *****
AG9872 HT_MOD - This is a Height Modernization Survey Station.
AG9872 DESIGNATION - WCA 2F4
AG9872 PID - AG9872
AG9872 STATE/COUNTY- FL/BROWARD
AG9872 USGS QUAD - EAST OF DEEM CITY (1973)
AG9872
AG9872 *CURRENT SURVEY CONTROL
AG9872
AG9872* NAD 83(1999)- 26 19 01.02445(N) 080 23 06.56163(W) ADJUSTED
AG9872* NAVD 88 - 3.94 (meters) 12.9 (feet) GPS OBS
AG9872
AG9872 X - 955,515.791 (meters) COMP
AG9872 Y - -5,640,461.242 (meters) COMP
AG9872 Z - 2,810,571.100 (meters) COMP
AG9872 LAPLACE CORR- -1.95 (seconds) DEFLEC99
AG9872 ELLIP HEIGHT- -21.22 (meters) (05/31/01) GPS OBS
AG9872 GEOID HEIGHT- -25.14 (meters) GEOID03
AG9872
AG9872 HORZ ORDER - FIRST
AG9872 ELLP ORDER - FOURTH CLASS I
AG9872
AG9872.The horizontal coordinates were established by GPS observations
AG9872.and adjusted by the National Geodetic Survey in May 2001.
AG9872
AG9872.The orthometric height was determined by GPS observations and a
AG9872.high-resolution geoid model using precise GPS observation and
AG9872.processing techniques.
AG9872
AG9872.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9872
AG9872.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9872
AG9872.The ellipsoidal height was determined by GPS observations
AG9872.and is referenced to NAD 83.
AG9872
AG9872.The geoid height was determined by GEOID03.
AG9872
AG9872;
AG9872; SPC FL E - 219,873.973 261,387.760 MT 0.99998769 +0 16 21.3
AG9872;UTM 17 - 2,910,930.935 561,366.815 MT 0.99964649 +0 16 21.3
AG9872
AG9872! - Elev Factor x Scale Factor = Combined Factor
AG9872!SPC FL E - 1.00000333 x 0.99998769 = 0.99999102
AG9872!UTM 17 - 1.00000333 x 0.99964649 = 0.99964982
AG9872
AG9872 SUPERSEDED SURVEY CONTROL
AG9872
AG9872 NAD 83(1990)- 26 19 01.02263(N) 080 23 06.56075(W) AD( ) 1
AG9872 ELLIP H (08/11/98) -21.20 (m) GP( ) 3 1
AG9872
AG9872.Superseded values are not recommended for survey control.
AG9872.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9872.See file dsdata.txt to determine how the superseded data were derived.
AG9872
AG9872_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK6136710931(NAD 83)
AG9872_MARKER: I = METAL ROD
AG9872_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9872_MARK LOGO: FLDEP
AG9872_PROJECTION: PROJECTING 61 CENTIMETERS
AG9872_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9872_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9872_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9872+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9872_ROD/PIPE-DEPTH: 7.5 meters
AG9872
AG9872 HISTORY - Date Condition Report By

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AG9872 HISTORY - 1998 MONUMENTED FLDEP

AG9872  
AG9872  
AG9872

## STATION DESCRIPTION

AG9872 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)  
AG9872 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,  
AG9872 CONSERVATION AREA NUMBER 2, IN ESTIMATED SECTION 31, TOWNSHIP 47  
AG9872 SOUTH, RANGE 30 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR  
AG9872 HELICOPTER. TO REACH THE STATION FROM THE SAWGRASS EXPRESSWAY  
AG9872 OVERPASS AND JUNCTION OF U.S. HIGHWAY 441 (STATE ROAD 7) IN PARKLAND,  
AG9872 GO NORTH ON U.S. HIGHWAY 441 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO  
AG9872 THE JUNCTION OF STATE ROAD 827 (LOXAHATCHEE ROAD) ON THE LEFT, JUST  
AG9872 SOUTH OF THE BROWARD-PALM BEACH COUNTY LINE, TURN LEFT ON STATE ROAD  
AG9872 827 (LOXAHATCHEE ROAD) AND GO NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO  
AG9872 THE END OF THE PAVEMENT AND STATE ROAD 827 AND THE ENTRANCE TO THE  
AG9872 LOXAHATCHEE NATIONAL WILDLIFE REFUGE, CONTINUE AHEAD ON THE GRAVEL  
AG9872 ROAD FOR 0.05 MI (0.08 KM) TO THE TOP OF THE LEVEE AND THE  
AG9872 INTERSECTION OF THE NORTH-SOUTH LEVEE L-36 ROAD, TURN LEFT ON THE  
AG9872 LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO THE BOAT RAMP ON THE  
AG9872 RIGHT, NOW BY AIRBOAT GO WEST-SOUTHWESTERLY FOR ABOUT 5.9 MI (9.5 KM)  
AG9872 LATITUDE 26 19 01.0 LONGITUDE 080 23 06.6 TO A WOODEN T-SHAPED  
AG9872 PLATFORM, 30.0 FT (9.1 M) BY 2.0 FT (0.6 M) NORTH-SOUTH AND 6.0 FT  
AG9872 (1.8 M) BY 2.0 FT (0.6 M) EAST-WEST WOODEN PLATFORM AND THE STATION  
AG9872 SET IN THE SOUTHWEST CORNER OF THE T-SHAPED PLATFORM, A STAINLESS  
AG9872 STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF 24.6 FT (7.5 M) SURROUNDED  
AG9872 BY A 5-INCH PVC PIPE, THE DATUM POINT IS RECESSED 0.3 FT (9.1 CM)  
AG9872 BELOW THE TOP OF THE PVC PIPE. NOTE THE PVC PIPE IS ABOUT 8.0 FT (2.4  
AG9872 M) LONG AND WAS DRIVEN INTO THE MUCK AND ATTACHED TO THE PLATFORM AT  
AG9872 THE TOP, THE PVC PIPE WAS NOT BACKFILLED. LOCATED 5.0 FT (1.5 M)  
AG9872 NORTH-NORTHWEST OF THE SOUTHWEST CORNER OF THE PLATFORM AND 1.5 FT  
AG9872 (0.5 M) SOUTHWEST OF THE SOUTH INSIDE CORNER OF THE T-SHAPED PLATFORM.  
AG9872 NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER MANAGEMENT DISTRICT (561)  
AG9872 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00

# The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9871 *****
AG9871 HT_MOD - This is a Height Modernization Survey Station.
AG9871 DESIGNATION - WCA 2RT
AG9871 PID - AG9871
AG9871 STATE/COUNTY- FL/BROWARD
AG9871 USGS QUAD - DEEM CITY (1974)
AG9871
AG9871 *CURRENT SURVEY CONTROL
AG9871
AG9871* NAD 83(1999)- 26 19 47.49325(N) 080 30 36.16031(W) ADJUSTED
AG9871* NAVD 88 - 4.62 (meters) 15.2 (feet) GPS OBS
AG9871
AG9871 X - 943,114.497 (meters) COMP
AG9871 Y - -5,641,905.868 (meters) COMP
AG9871 Z - 2,811,853.297 (meters) COMP
AG9871 LAPLACE CORR- -1.11 (seconds) DEFLEC99
AG9871 ELLIP HEIGHT- -20.36 (meters) (05/31/01) GPS OBS
AG9871 GEOID HEIGHT- -24.95 (meters) GEOID03
AG9871
AG9871 HORZ ORDER - FIRST
AG9871 ELLP ORDER - FOURTH CLASS I
AG9871
AG9871.The horizontal coordinates were established by GPS observations
AG9871.and adjusted by the National Geodetic Survey in May 2001.
AG9871
AG9871.The orthometric height was determined by GPS observations and a
AG9871.high-resolution geoid model using precise GPS observation and
AG9871.processing techniques.
AG9871
AG9871.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9871
AG9871.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9871
AG9871.The ellipsoidal height was determined by GPS observations
AG9871.and is referenced to NAD 83.
AG9871
AG9871.The geoid height was determined by GEOID03.
AG9871
AG9871; North East Units Scale Factor Converg.
AG9871;SPC FL E - 221,250.737 248,912.905 MT 0.99997070 +0 13 02.3
AG9871;UTM 17 - 2,912,307.229 548,896.216 MT 0.99962952 +0 13 02.3
AG9871
AG9871! - Elev Factor x Scale Factor = Combined Factor
AG9871!SPC FL E - 1.00000320 x 0.99997070 = 0.99997390
AG9871!UTM 17 - 1.00000320 x 0.99962952 = 0.99963272
AG9871
AG9871 SUPERSEDED SURVEY CONTROL
AG9871
AG9871 NAD 83(1990)- 26 19 47.49145(N) 080 30 36.15965(W) AD( ) 1
AG9871 ELLIP H (08/11/98) -20.34 (m) GP( ) 3 1
AG9871
AG9871.Superseded values are not recommended for survey control.
AG9871.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9871.See file dsdata.txt to determine how the superseded data were derived.
AG9871
AG9871_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK4889612307(NAD 83)
AG9871_MARKER: I = METAL ROD
AG9871_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9871_MARK LOGO: FLDEP
AG9871_PROJECTION: PROJECTING 61 CENTIMETERS
AG9871_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9871_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9871_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9871+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9871_ROD/PIPE-DEPTH: 5.6 meters
AG9871
AG9871 HISTORY - Date Condition Report By

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AG9871 HISTORY - 1998 MONUMENTED FLDEP

AG9871

AG9871

## STATION DESCRIPTION

AG9871

AG9871 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9871 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9871 CONSERVATION AREA NUMBER 2, IN SECTION 26, TOWNSHIP 47 SOUTH, RANGE 38

AG9871 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR HELICOPTER. TO REACH

AG9871 THE STATION FROM THE SAWGRASS EXPRESSWAY OVERPASS AND JUNCTION OF U.S.

AG9871 HIGHWAY 441 (STATE ROAD 7) IN PARKLAND, GO NORTH ON U.S. HIGHWAY 441

AG9871 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO THE JUNCTION OF STATE ROAD 827

AG9871 (LOXAHATCHEE ROAD) ON THE LEFT, JUST SOUTH OF THE BROWARD-PALM BEACH

AG9871 COUNTY LINE, TURN LEFT ON STATE ROAD 827 (LOXAHATCHEE ROAD) AND GO

AG9871 NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO THE END OF THE PAVEMENT AND

AG9871 STATE ROAD 827 AND THE ENTRANCE TO THE LOXAHATCHEE NATIONAL WILDLIFE

AG9871 REFUGE, CONTINUE AHEAD ON THE GRAVEL ROAD FOR 0.05 MI (0.08 KM) TO THE

AG9871 TOP OF THE LEVEE AND THE INTERSECTION OF THE NORTH-SOUTH LEVEE L-36

AG9871 ROAD, TURN LEFT ON THE LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO

AG9871 THE BOAT RAMP ON THE RIGHT, NOW BY AIRBOAT GO WEST-SOUTHWESTERLY FOR

AG9871 ABOUT 13.2 MI (21.2 KM) LATITUDE 26 19 47.5 LONGITUDE 080 30 36.2 TO A

AG9871 6.0 FT (1.8 M) BY 4.0 FT (1.2 M) WOODEN PLATFORM AND THE STATION, SET

AG9871 IN THE SOUTHWEST CORNER OF THE PLATFORM, A STAINLESS STEEL ROD DRIVEN

AG9871 TO REFUSAL AT A DEPTH OF 18.4 FT (5.6 M) SURROUNDED BY A 5-INCH PVC

AG9871 PIPE, THE DATUM POINT IS RECESSED 0.3 FT (9.1 CM) BELOW THE TOP OF THE

AG9871 PVC PIPE. NOTE THE PVC PIPE IS ABOUT 8.0 FT (2.4 M) LONG AND WAS

AG9871 DRIVEN INTO THE MUCK AND ATTACHED TO THE PLATFORM AT THE TOP, THE PVC

AG9871 PIPE WAS NOT BACKFILLED. LOCATED 2.0 FT (0.6 M) EAST OF THE WEST SIDE

AG9871 OF THE PLATFORM AND 2.0 FT (0.6 M) NORTH OF THE SOUTH SIDE OF THE

AG9871 PLATFORM. NOTE FOR ACCESS CONTACT SOUTH FLORIDA WATER MANAGEMENT

AG9871 DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00

# The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9876 *****
AG9876 HT_MOD - This is a Height Modernization Survey Station.
AG9876 DESIGNATION - WCA 2U1
AG9876 PID - AG9876
AG9876 STATE/COUNTY- FL/BROWARD
AG9876 USGS QUAD - COOPER CITY NE (1983)
AG9876
AG9876 *CURRENT SURVEY CONTROL
AG9876
AG9876* NAD 83(1999)- 26 14 27.27752(N) 080 21 20.40708(W) ADJUSTED
AG9876* NAVD 88 - 3.75 (meters) 12.3 (feet) GPS OBS
AG9876
AG9876 X - 959,043.395 (meters) COMP
AG9876 Y - -5,643,645.810 (meters) COMP
AG9876 Z - 2,803,017.004 (meters) COMP
AG9876 LAPLACE CORR- -2.12 (seconds) DEFLEC99
AG9876 ELLIP HEIGHT- -21.42 (meters) (05/31/01) GPS OBS
AG9876 GEOID HEIGHT- -25.16 (meters) GEOID03
AG9876
AG9876 HORZ ORDER - FIRST
AG9876 ELLP ORDER - FOURTH CLASS I
AG9876
AG9876.The horizontal coordinates were established by GPS observations
AG9876.and adjusted by the National Geodetic Survey in May 2001.
AG9876
AG9876.The orthometric height was determined by GPS observations and a
AG9876.high-resolution geoid model using precise GPS observation and
AG9876.processing techniques.
AG9876
AG9876.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9876
AG9876.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9876
AG9876.The ellipsoidal height was determined by GPS observations
AG9876.and is referenced to NAD 83.
AG9876
AG9876.The geoid height was determined by GEOID03.
AG9876
AG9876;
AG9876; SPC FL E - North East Units Scale Factor Converg.
AG9876;UTM 17 - 2,902,523.581 564,351.920 MT 0.99999232 +0 17 05.6
AG9876
AG9876! - Elev Factor x Scale Factor = Combined Factor
AG9876!SPC FL E - 1.00000337 x 0.99999232 = 0.99999569
AG9876!UTM 17 - 1.00000337 x 0.99965113 = 0.99965449
AG9876
AG9876 SUPERSEDED SURVEY CONTROL
AG9876
AG9876 NAD 83(1990)- 26 14 27.27559(N) 080 21 20.40628(W) AD( ) 1
AG9876 ELLIP H (08/11/98) -21.40 (m) GP( ) 3 1
AG9876
AG9876.Superseded values are not recommended for survey control.
AG9876.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9876.See file dsdata.txt to determine how the superseded data were derived.
AG9876
AG9876_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK6435202524(NAD 83)
AG9876_MARKER: I = METAL ROD
AG9876_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9876_MARK LOGO: FLDEP
AG9876_PROJECTION: PROJECTING 61 CENTIMETERS
AG9876_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9876_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9876_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9876+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9876_ROD/PIPE-DEPTH: 8.8 meters
AG9876
AG9876 HISTORY - Date Condition Report By

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AG9876 HISTORY - 1998 MONUMENTED FLDEP

AG9876

AG9876

## STATION DESCRIPTION

AG9876

AG9876 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9876 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9876 CONSERVATION AREA NUMBER 2, IN ESTIMATED SECTION 33, TOWNSHIP 48

AG9876 SOUTH, RANGE 40 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR

AG9876 HELICOPTER. TO REACH THE STATION FROM THE SAWGRASS EXPRESSWAY

AG9876 OVERPASS AND JUNCTION OF U.S. HIGHWAY 441 (STATE ROAD 7) IN PARKLAND,

AG9876 GO NORTH ON U.S. HIGHWAY 441 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO

AG9876 THE JUNCTION OF STATE ROAD 827 (LOXAHATCHEE ROAD) ON THE LEFT, JUST

AG9876 SOUTH OF THE BROWARD-PALM BEACH COUNTY LINE, TURN LEFT ON STATE ROAD

AG9876 827 (LOXAHATCHEE ROAD) AND GO NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO

AG9876 THE END OF THE PAVEMENT AND STATE ROAD 827 AND THE ENTRANCE TO THE

AG9876 LOXAHATCHEE NATIONAL WILDLIFE REFUGE, CONTINUE AHEAD ON THE GRAVEL

AG9876 ROAD FOR 0.05 MI (0.08 KM) TO THE TOP OF THE LEVEE AND THE

AG9876 INTERSECTION OF THE NORTH-SOUTH LEVEE L-36 ROAD, TURN LEFT ON THE

AG9876 LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO THE BOAT RAMP ON THE

AG9876 RIGHT, NOW BY AIRBOAT GO SOUTH-SOUTHWESTERLY FOR ABOUT 8.5 MI (13.7

AG9876 KM) LATITUDE 26 14 27.3 LONGITUDE 080 21 20.4 TO A 30.0 FT (9.1 M) BY

AG9876 2.0 FT (0.6 M) WOODEN PLATFORM AND THE STATION SET IN THE SOUTH END OF

AG9876 THE PLATFORM, A STAINLESS STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF

AG9876 28.9 FT (8.8 M) SURROUNDED BY A 5-INCH PVC PIPE, THE DATUM POINT IS

AG9876 RECESSED 0.3 FT (9.1 CM) BELOW THE TOP OF THE PVC PIPE. NOTE THE PVC

AG9876 PIPE IS ABOUT 8.0 FT (2.4 M) LONG AND WAS DRIVEN INTO THE MUCK AND

AG9876 ATTACHED TO THE PLATFORM AT THE TOP, THE PVC PIPE WAS NOT BACKFILLED.

AG9876 LOCATED 2.0 FT (0.6 M) NORTH OF THE SOUTH END OF THE PLATFORM, 1.0 FT

AG9876 (0.3 M) EAST OF THE WEST SIDE OF THE PLATFORM AND 1.0 FT (0.3 M) WEST

AG9876 OF THE EAST SIDE OF THE PLATFORM. NOTE FOR ACCESS CONTACT SOUTH

AG9876 FLORIDA WATER MANAGEMENT DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00

# The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12
1 National Geodetic Survey, Retrieval Date = FEBRUARY 10, 2005
AG9874 *****
AG9874 HT_MOD - This is a Height Modernization Survey Station.
AG9874 DESIGNATION - WCA 2U3
AG9874 PID - AG9874
AG9874 STATE/COUNTY- FL/BROWARD
AG9874 USGS QUAD - EAST OF DEEM CITY (1973)
AG9874
AG9874 *CURRENT SURVEY CONTROL
AG9874
AG9874* NAD 83(1999)- 26 17 14.92243(N) 080 24 41.06716(W) ADJUSTED
AG9874* NAVD 88 - 3.92 (meters) 12.9 (feet) GPS OBS
AG9874
AG9874 X - 953,172.389 (meters) COMP
AG9874 Y - -5,642,325.172 (meters) COMP
AG9874 Z - 2,807,643.830 (meters) COMP
AG9874 LAPLACE CORR- -1.81 (seconds) DEFLEC99
AG9874 ELLIP HEIGHT- -21.17 (meters) (05/31/01) GPS OBS
AG9874 GEOID HEIGHT- -25.08 (meters) GEOID03
AG9874
AG9874 HORZ ORDER - FIRST
AG9874 ELLP ORDER - FOURTH CLASS I
AG9874
AG9874.The horizontal coordinates were established by GPS observations
AG9874.and adjusted by the National Geodetic Survey in May 2001.
AG9874
AG9874.The orthometric height was determined by GPS observations and a
AG9874.high-resolution geoid model using precise GPS observation and
AG9874.processing techniques.
AG9874
AG9874.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9874
AG9874.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9874
AG9874.The ellipsoidal height was determined by GPS observations
AG9874.and is referenced to NAD 83.
AG9874
AG9874.The geoid height was determined by GEOID03.
AG9874
AG9874; North East Units Scale Factor Converg.
AG9874;SPC FL E - 216,596.488 258,781.539 MT 0.99998382 +0 15 38.4
AG9874;UTM 17 - 2,907,654.568 558,761.483 MT 0.99964263 +0 15 38.4
AG9874
AG9874! - Elev Factor x Scale Factor = Combined Factor
AG9874!SPC FL E - 1.00000333 x 0.99998382 = 0.99998715
AG9874!UTM 17 - 1.00000333 x 0.99964263 = 0.99964595
AG9874
AG9874 SUPERSEDED SURVEY CONTROL
AG9874
AG9874 NAD 83(1990)- 26 17 14.92057(N) 080 24 41.06637(W) AD( ) 1
AG9874 ELLIP H (08/11/98) -21.15 (m) GP( ) 3 1
AG9874
AG9874.Superseded values are not recommended for survey control.
AG9874.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9874.See file dsdata.txt to determine how the superseded data were derived.
AG9874
AG9874_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK5876107655(NAD 83)
AG9874_MARKER: I = METAL ROD
AG9874_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AG9874_MARK LOGO: FLDEP
AG9874_PROJECTION: PROJECTING 61 CENTIMETERS
AG9874_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9874_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AG9874_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9874+SATELLITE: SATELLITE OBSERVATIONS - 1998
AG9874_ROD/PIPE-DEPTH: 5.8 meters
AG9874
AG9874 HISTORY - Date Condition Report By

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AG9874 HISTORY - 1998 MONUMENTED FLDEP

AG9874

AG9874

## STATION DESCRIPTION

AG9874

AG9874 DESCRIBED BY FL DEPT OF ENV PRO 1998 (SAS)

AG9874 THE STATION IS IN THE EVERGLADES WILDLIFE MANAGEMENT AREA,

AG9874 CONSERVATION AREA NUMBER 2, IN SECTION 11, TOWNSHIP 48 SOUTH, RANGE 39

AG9874 EAST. NOTE--ACCESS TO STATION IS BY AIRBOAT OR HELICOPTER. TO REACH

AG9874 THE STATION FROM THE SAWGRASS EXPRESSWAY OVERPASS AND JUNCTION OF U.S.

AG9874 HIGHWAY 441 (STATE ROAD 7) IN PARKLAND, GO NORTH ON U.S. HIGHWAY 441

AG9874 (STATE ROAD 7) FOR 1.8 MI (2.9 KM) TO THE JUNCTION OF STATE ROAD 827

AG9874 (LOXAHATCHEE ROAD) ON THE LEFT, JUST SOUTH OF THE BROWARD-PALM BEACH

AG9874 COUNTY LINE, TURN LEFT ON STATE ROAD 827 (LOXAHATCHEE ROAD) AND GO

AG9874 NORHTWESTERLY FOR 6.3 MI (10.1 KM) TO THE END OF THE PAVEMENT AND

AG9874 STATE ROAD 827 AND THE ENTRANCE TO THE LOXAHATCHEE NATIONAL WILDLIFE

AG9874 REFUGE, CONTINUE AHEAD ON THE GRAVEL ROAD FOR 0.05 MI (0.08 KM) TO THE

AG9874 TOP OF THE LEVEE AND THE INTERSECTION OF THE NORTH-SOUTH LEVEE L-36

AG9874 ROAD, TURN LEFT ON THE LEVEE ROAD AND GO SOUTH FOR 0.2 MI (0.3 KM) TO

AG9874 THE BOAT RAMP ON THE RIGHT, NOW BY AIRBOAT GO WEST-SOUTHWESTERLY FOR

AG9874 ABOUT 8.3 MI (13.4 KM) LATITUDE 26 17 14.9 LONGITUDE 080 24 41.1 TO A

AG9874 WOODEN T-SHAPED PLATFORM, 30.1 FT (9.2 M) NORTH-SOUTH AND 11.3 FT (3.4

AG9874 M) BY 1.8 FT (0.5 M) EAST-WEST AND THE STATION SET IN THE SOUTHEAST

AG9874 CORNER OF THE T-SHAPED PLATFORM, A STAINLESS STEEL ROD DRIVEN TO

AG9874 REFUSAL AT A DEPTH OF 19.1 FT (5.8 M) SURROUNDED BY A 5-INCH PVC PIPE,

AG9874 THE DATUM POINT IS RECESSED 0.3 FT (9.1 CM) BELOW THE TOP OF THE PVC

AG9874 PIPE. NOTE THE PVC PIPE IS ABOUT 8.0 FT (2.4 M) LONG AND WAS DRIVEN

AG9874 INTO THE MUCK AND ATTACHED TO THE PLATFORM AT THE TOP, THE PVC PIPE

AG9874 WAS NOT BACKFILLED. LOCATED 24.3 FT (7.4 M) SOUTH OF THE NORTH END OF

AG9874 THE PLATFORM, 20.7 FT (6.3 M) SOUTH OF A WELL PIPE FOR A WATER GAGE,

AG9874 11.3 FT (3.4 M) EAST OF THE WEST END OF THE PLATFORM, 8.6 EAST OF A

AG9874 WELL PIPE FOR A WATER GAGE BOX NUMBER GW4, 6.3 FT (1.9 M) EAST OF A

AG9874 WELL PIPE FOR WATER GAGE BOX NUMBER GW3 AND 5.8 FT (1.8 M) NORTH OF

AG9874 THE SOUTH END OF THE PLATFORM. NOTE FOR ACCESS CONTACT SOUTH FLORIDA

AG9874 WATER MANAGEMENT DISTRICT (561) 686-8800.

\*\*\* retrieval complete.

Elapsed Time = 00:00:00