Specific Purpose Survey of the Monitoring Wells OSF-64 Osceola County, Florida

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South Florida Water Management District's Purchase Order number PC P602214

Keith and Schnars project number 16434.07, Task 22003 Report Date: August 15, 2006 Submittal: First

Prepared for:

South Florida Water Management District

Prepared by:



2525 Drane Field Road Suite #7 Lakeland, FL 33811 Ph. (863) 646-4771 Fax (863) 464-3378 Licensed Business (L.B.) 1337

TABLE OF CONTENTS

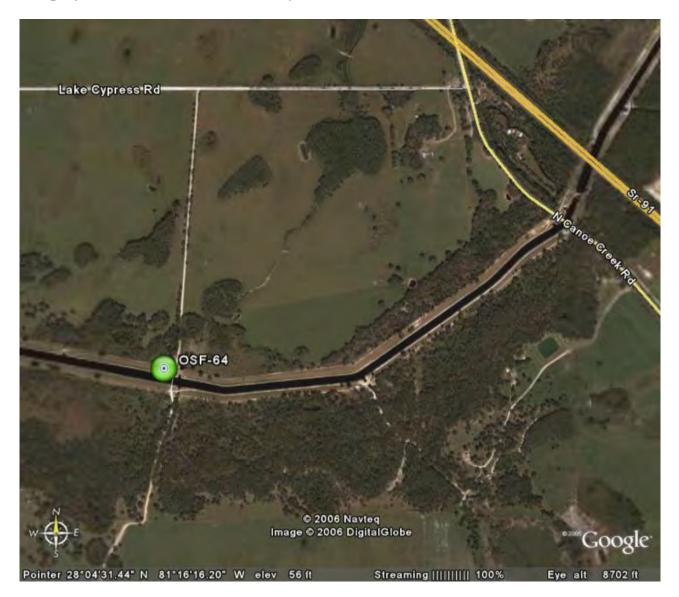
Purpose	1
Project location	1
Deliverables	2
Datum	2
Leveling Methods	2
Vertical Control	3
Project Results	4-5
Project Photos	6-12
Surveyor's Certificate	13

PURPOSE

To establish vertical data (NAVD 1988 and NGVD 1929) on the Monitoring Wells at the structure.

LOCATION OF PROJECT

The project is located in Osceola County.



ITEMS DELIVERED TO THE DISTRICT

- 1. Electronic copy of field notes.
- 2. Electronic copy of all computation sheets.
- 3. CORPSMET 95 file.
- 4. Site photographs.
- 5. Surveyor's Report.

DATUM FOR THE PROJECT

The vertical datum for the project is North American Datum of 1988 (NAVD '88). National Geodetic Survey vertical control monuments with published NAVD '88 elevations were used as the basis for this survey. The National Geodetic Vertical Datum of 1929 (NGVD '29) shown were computed using CORPSCON version 6.0 program.

LEVELING METHODS

Benchmark OSF-64 was constructed at the site. The elevations were established from Benchmark G 506 using a Topcon AT-F2 conventional level and three-wire observation method.

VERTICAL CONTROL

BM G 506	Elevation:	NAVD 1988	56.24'	NGVD 1929	
Found in National Geodetic Survey Database	Latitude	28°04'00" (Scaled)			
State/County FL/Osceola	Longitude	81°16'48" (Scaled)			
USGS QUAD Cypress Lake (1987)					
Horiz. Order (Preliminary) Class (Preliminary)		DESCRIBED BY FL D	EPT OF ENV	PRO 2001 (JLM)	
		THE MARK IS ABOU OF LAKE WALES, IN RANGE 30 EAST. TO INTERSECTION OF S IN LAKE WALES, GC 60 FOR 7.3 MI (11.7 K GROVE ROAD ON TH GROVE ROAD AND C THE JUNCTION OF C TURN RIGHT ON CA 0.25 MI (0.40 KM) TO CAMP MACK ROAD OF BARNEY KEEN R RIGHT, CONTINUE N ROAD FOR 5.35 MI (8 KISSIMMEE STATE F NORTH ON CAMP M. THE JUNCTION OF A RIGHT ON THE SANI 75.0 FT (22.9 M) TO A NORTHEAST ON THI TO A Y-JUNCTION, C ROAD FOR 0.25 MI (0 A BRIDGE (SPANNIN CONTINUE NORTHE MI (5.1 KM) TO A LO EAST, CONTINUE EA (0.3 KM) TO THE T-JJ POWER LINE, TURN NORTHEAST FOR 75 CONTINUE NORTHE (11.3 KM) TO THE MA OF A ROUND CONCE GROUND AND LEVE 540.0 FT (164.6 M) NC THEN SOUTHWEST, APPROXIMATE CEN (0.5 M) WEST OF A B WEST OF A CARSON	SECTION 12 REACH THE TATE ROAD DEAST-SOUT M) TO THE J IE LEFT, TUI GO NORTH F AMP MACK RO A CURVE EA FOR 2.3 MI (2 OAD (BOY S ORTHEASTH 61 KM) TO T PARK ON THE CAR OAD AND D ROAD AND CONTINUE NO ACKED GATE ST ON THE CKED GATE ST ON THE CKED GATE ST ON THE CKED GATE ST ON THE CKED GATE ST ON THE CAST ON T	, TOWNSHIP 28 ; MARK FROM TI 27 AND STATE HEAST ON STAT UNCTION OF M. RN LEFT ON MA OR 2.05 MI (3.30 ROAD ON THE F DAD AND GO N(AST, CONTINUE 3.7 KM) TO THE . COUT ROAD) OF ERLY ON CAMP THE ENTRANCE E RIGHT, CONTI OR 0.1 MI (0.2 K D ON THE RIGHT OG NORTHEAST ON THE RIGHT OG NORTHEAST ON THE RIGHT OG NORTHEAST ON THE SOUTHWES E RIVER CANA SAND ROAD FO AND A 90 DEGR SAND ROAD FO A SAND ROAD FO SAND FO SAND ROAD FO SAND FO SAND FO SAND FO SAND FO SAND FO SAND FO SAND FO	SOUTH, HE ROAD 60 FE ROAD AMMOTH MMOTH KM) TO RIGHT, DRTH FOR EAST ON JUNCTION V THE MACK TO LAKE MUCTION V THE MACK TO LAKE M) TO C, TURN T FOR 0.56 KM) FHE SAND T END OF L), DR 3.2 EE TURN R 0.2 MI FHE SAND T END OF L), DR 3.2 EE TURN R 0.2 MI FHE TOP TH THE DCATED WEST ED, 1.5 FT T (0.4 M) FER

PROJECT RESULTS

Monitoring Well (GW-1)	Monitoring Well (GW-2)
Monitoring Well OSF-64:	Monitoring Well OSF-64:
Reference mark:	Reference mark:
<u>Set mark on S. side PVC pipe</u>	<u>Set mark on S. side PVC pipe</u>
<u>With initials K&S.</u>	<u>With initials K&S.</u>
New Reference	New Reference
Mark El. <u>64.831'</u>	Mark El. <u>64.611'</u>
(NGVD '29)	(NGVD '29)
(<u>Wrote -1.129' to NAVD 1988</u>).	(<u>Wrote -1.129' TO NAVD 1988</u>).
Initials:	Initials:
<u>K&S</u>	<u>K&S</u>
<u>B.M., R.F.</u>	<u>B.M., R.F.</u>
Date:	Date:
<u>7/26/06</u>	7/26/06
written at the mark:	written at the mark:
El. <u>65.13'</u>	El. <u>64.89'</u>
Date: <u>01/09/04</u>	Date: <u>01/09/04</u>
By: <u>None</u>	By: <u>None</u>
Reference Mark location:	Reference Mark location:
<u>Top of PVC Pipe</u>	<u>Top of PVC Pipe</u>

PROJECT RESULTS

Monitoring Well (GW-3)

Monitoring Well OSF-64: Reference mark: Set mark on N. side PVC pipe With initials K&S.

New Reference Mark El. <u>63.000'</u> (NGVD '29) (<u>Wrote -1.129' to NAVD 1988</u>).

Initials:

<u>K&S</u>

<u>B.M., R.F.</u>

Date: 7/26/06

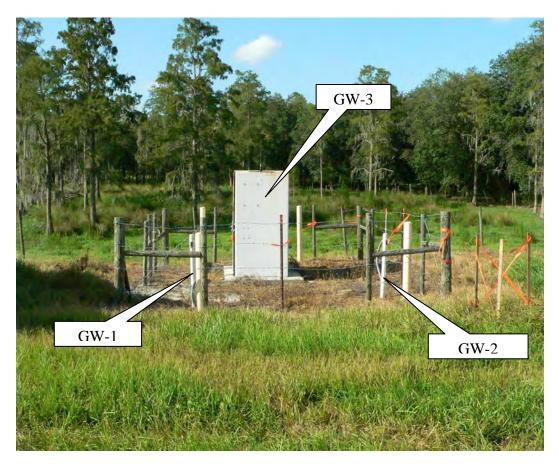
written at the mark:

El. <u>63.805'</u> Date: <u>01/09/04</u> By: <u>None</u>

Reference Mark location:

Top of the inside rim of PVC Pipe

PROJECT PHOTO



PROJECT PHOTO

<u>OSF-64 (GW-1)</u>



PROJECT PHOTO

<u>OSF-64 (GW-2)</u>



PROJECT PHOTO

<u>OSF-64 (GW-3)</u>



PROJECT PHOTO

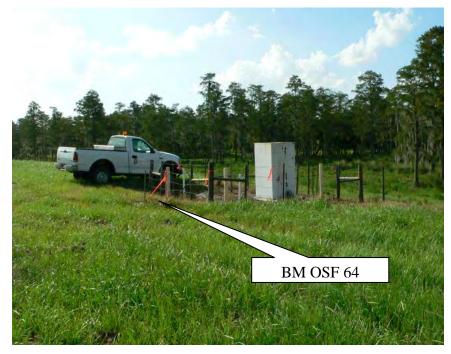
AND NO. BUTTON CHARTER OF A SUCCESSION OF AND A SUCCESSION OF OSF-64 R.P. Elevations 2" East Well 64.48'GV2 (Dear) 2" West Well 64.68'GW1 8" Interior Well 62.79'GW3 1/9/01 NEW ELEVATION'S G/W 1 65.13 G/W 2 64.89 G/W 3 63.805

PROJECT PHOTO



PROJECT PHOTO





Comments:

Party Chief: <u>T. Coon</u> Field Book: <u>1161</u> Page <u>30-32</u> Bench Mark: <u>"G 506"</u> El. <u>56.24</u>', Vertical Datum: <u>NAVD1988</u> Offset: <u>1.135'</u> SFWMD VALUE (add value to convert to NGVD 1929) Offset: <u>1.135'</u> NGS VALUE (add this value to convert to NGVD 1929) NAVD 88 - North American Vertical Datum of 1988 NGVD29 -National Geodetic Vertical Datum of 1929 NAD 83-99 (Horizontal Datum) North American Datum NGS- National Geodetic Survey SFWMD- South Florida Water Management District PVC- Polyvinyl Chloride

SURVEYOR'S CERTIFICATION

I hereby certify that this Specific Purpose Survey meets applicable portions of the Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 61-G17, Florida Administrative Code. This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable.

> **KEITH and SCHNARS, PA. L.B. number 1337**

By:

Date of Survey July 26, 2006 Kenneth T. Glass, PSM Professional Surveyor and Mapper State of Florida Certificate No. 5713

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Identification_Information: Citation: Citation_Information: Originator: Kenneth T. Glass, P.S.M. (ed.) Publication_Date: 20060726 Publication_Time: Unknown Title: S.F.W.M.D. Monitoring Well Edition: 0SF-64 Kenneth T. Glass Keith & Schnars P.A. Series_Information: Publication_Information: Publication Place: Not Published Publisher: None Online_Linkage: kglass@keithandschnars.com Larger_Work_Citation: Citation_Information: Series_Information: Publication_Information: Description: Abstract: South Florida Water Management District Structure OSF-64 Purpose: Purpose To establish reference elevations in NAVD 1988 and NGVD 1929 datum at the Monitoring Well(s). Time_Period_of_Content: Time_Peri od_Information: Survey Date Single_Date/Time: Calendar_Date: 20060726 Range_of_Dates/Times: Multiple_Dates/Times: Currentness_Reference: Publication Date Status: Progress: Complete Maintenance_and_Update_Frequency: Unknown Spatial_Domain: Boundi ng_Coordi nates: West_Bounding_Coordinate: 81°16'47" East_Boundi ng_Coordi nate: 81°16'47" North_Bounding_Coordinate: 28°04'21" South_Bounding_Coordinate: 28°04'21" Keywords: Theme: Theme_Keyword_Thesaurus: Specific Purpose Survey Theme_Keyword: Monitoring Well(s) PI ace: Place_Keyword_Thesaurus: Osceola County Place_Keyword: S.F.W.M.D. Monitoring Well OSF-64 Place_Keyword: SEC. 01 - T28S - R30E Stratum: Temporal: Access_Constraints: Key needed to gain access to Monitoring Wells. Use_Constraints: Call South Florida Water Management District for key. Point_of_Contact: Howard Ehmke Contact_Information: Contact_Person_Primary: Contact_Person: Howard J. Ehmke **SFWMD** Contact_Organization: South Florida Water Management District Contact_Organization_Primary: Contact_Position: P.S.M. Contact_Address: Address_Type: mailing and physical address Address: Acceler 8 Suite 150 2301 Centerpark West Drive City: West Palm Beach State_or_Province: Florida Postal_Code: 33409 Country: USA Page 1

OSF 64. gen Contact_Voice_Telephone: (561) 242-5520 ext 4064 Contact_Electronic_Mail_Address: hehmke@sfwmd.gov Hours_of_Service: 8:00 am to 5:00 pm EST Security_Information: Cross_Reference: Citation_Information: Series_Information: Publication_Information: Data_Quality_Information: Attribute_Accuracy: Attribute Accuracy Report: The horizontal location of the benchmark was taken from a **Equipment Used** hand held G.P.S. unit. The vertical data was collected using a Topcon AT-F2 Level. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/90. Elevations are based on NAVD 1988 with an offset supplied to convert to NGVD 1929. Logi cal _Consi stency_Report: Vertical data on the monitoring well was established using the site bench mark. Completeness_Report: 64.831' (NGV

 eness_keport:

 64.831' (NGVD 1929)
 OSF-64 Well (GW-1).

 Offset written at wells (-) 1.129' to NAVD 1988.

 64.611' (NGVD 1929)
 OSF-64 Well (GW-2).

 Offset written at wells (-) 1.129' to NAVD 1988.

 63.000' (NGVD 1929)
 OSF-64 Well (GW-3).

 Offset written at wells (-) 1.129' to NAVD 1988.

 03.000' (NGVD 1929)
 OSF-64 Well (GW-3).

 055 64 2006 was the site benchmark used for this

 Project Results OSF-64 2006 was the site benchmark used for this survey. NAVE ... Positional_Accuracy: Horizontal_Positional_Accuracy: tal Horizontal_Positional_Accuracy_Report: The horizontal position of the benchmark was established using a hand held GPS. ...tative Horizontal_Positional_Accuracy_Asses survey. NAVD 1988 elevation 60.772' Horizontal Quanti tati ve_Hori zontal _Posi ti onal _Accuracy_Assessment: Hori zontal _Posi ti onal _Accuracy_Value: Lat. 28°04' 21" Long. 81°16'47" Hori zontal _Positional _Accuracy_Explanation: Value derived by hand-held GPS unit. Verti cal _Posi ti onal _Accuracy: Vertical_Positional_Accuracy_Report: The onsite benchmark was used to establish the elevations on the monitoring well(s) in this report. Quanti tati ve_Verti cal _Posi ti onal _Accuracy_Assessment: Vertical_Positional_Accuracy_Value: 0.009 ft. NAVD88 Vertical_Positional_Accuracy_Explanation: Better than 0.03ft. x sq. root of miles of the level loop. Li neage: Source_Information: Source_Citation: Citation_Information: Series_Information: Publication_Information: Larger_Work_Citation: Citation_Information: Series_Information: Publication_Information: Source_Time_Period_of_Content: Time_Period_Information: Single_Date/Time: Range_of_Dates/Times: Multiple_Dates/Times: Process_Step: Process Description: Differential leveling was performed using a Topcon AT-F2 **Level Line** level. The onsite bench mark OSF64 2006 was used to determine the monitoring well elevation. Elevations were written at the wells in NGVD 1929 with an offset provided to convert the elevations to NAVD 1988. Process_Date: 20060726 Page 2

OSF 64. gen Process_Contact: Contact_Information: Contact_Person_Primary: Contact_Organi zati on_Pri mary: Contact_Address: Spati al _Data_Organi zati on_I nformati on: Spatial_Reference_Information: Horizontal_Coordinate_System_Definition: Geographic: Latitude Resolution: 28°04'21" Longi tude_Resol uti on: 81°16'47" Geographic_Coordinate_Units: Degrees, minutes, and decimal seconds Geodetic_Model: Verti cal _Coordi nate_System_Defi ni ti on: Al ti tude_System_Definition: Depth_System_Definition: Entity_and_Attribute_Information: Detailed_Description: Entity_Type: Attri bute: Attribute_Domain_Values: Attri bute_Val ue_Accuracy_I nformati on: Overview_Description: Di stri buti on_l nformati on: Distributor: Contact_Information: Contact_Person_Primary: Contact_Organi zati on_Pri mary: Contact_Organization: Keith and Schnars, P.A. Contact_Person: Kenneth T. Glass, P.S.M. Contact_Position: Director of Surveying and Mapping Lakel and Contact_Address: Address_Type: mailing and physical address Address: 2525 Drane Field Rd., Suite 7 City: Lakel and rostal_Code: 33811 Country: Polk Contact_Voice_Telephone: (863)-646-4771 Contact_Facsimile_Telephone: (863)-646-3378 Contact_Electronic_Mail_Address: kglass@keithandschnars.com Hours_of_Service: 8:00-5:00 est. Distribution_Liability: None Standard_Order_Process: State_or_Province: Florida Digital_Form: Digital_Transfer_Information: Digital_Transfer_Option: Online_Option: Computer_Contact_Information: Network_Address: Di al up_Tnstructi ons: OffLine_Option: Recording_Capacity: Available_Time_Period: Time_Period_Information: Single_Date/Time: Range_of_Dates/Times: Multiple_Dates/Times: Metadata_Reference_Information: Metadata_Date: 20060809 Metadata_Contact: Contact_Information: Contact_Person_Primary: Contact_Person: Kenneth T. Glass, P.S.M. Contact_Organization: Keith and Schnars, P.A. Contact_Organization_Primary: Contact_Position: Director of Surveying and Mapping Lakel and Contact_Address: Address_Type: mailing and physical address

OSF 64.gen Address: 2525 Drane Field Rd., Suite 7 City: Lakeland State_or_Province: FL Postal_Code: 33811 Country: USA Contact_Voice_Telephone: (863) 646-4771 Contact_Facsimile_Telephone: (863) 646-3378 Contact_Electronic_Mail_Address: kglass@keithandschnars.com Hours_of_Service: 8:00 am to 5:00 pm EST Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata Metadata_Security_Information:



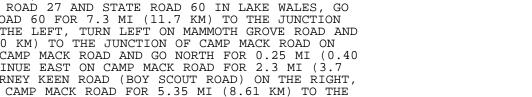
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

					Rev. 4/01		
COUNTY	PROJECT		DESIGNATION				
OSCEOLA			Structure OSF-64				
SECTION 1	TOWNSHIP <u>28</u> SOUTH		RANGE <u>30</u> EAST				
GEOGRAPHIC INDEX OF QUAD				-			
Established by KEITH AND SCHN	ARS	NAM	E OF QUADRA	NGLE			
Recovered by		CYPE	ESS LAKE				
SET CLASS "C" MONUNENT WITH SFWMD BRASS DISK.							
SURVEYOR <u>T. COON</u> (Keith and S DATE 07/06/2006	chnars)	FIELI	D BOOK, 1161	, pgs. 30-:	32		
HORIZONTAL DATUM: 1983 with	1999 correcti	on,	ZONE East				
VERTICAL DATUM: NGVD 192	9 and NAVD '	1988					
CONTROL ACCURACY: HORIZO	NTAL HAND-HEL	D GPS	6, 3 rd Order V	ERTICAL			
STATE PLANE COORDINATES	X = 565962		Y = 1359166		EL. (NGVD 1929)		
					61.901'		
					EL. (NAVD 1988)		
					60.772'		
LATITUDE 28º 04' 21"			LON	IGITUDE	<u>81º 16' 47"</u>		
	DESC	CRIPTI	NC				
South Florida Water Management Dis	strict brass disk se	t in con	crete monume	nt stampe	d OSF 64 / 2006		
The benchmark is located 11.7 miles							
To reach the mark from the intersection							
Vermont Ave. a distance of 11.7 mile							
Then travel West along Lake Cypress Rd. for a distance of 0.7 miles to a dirt road on the south side of the road. Then travel South along the dirt road a distance of 0.8 miles to a metal gate on the west side of the road							
Just before the Bridge crossing the ca							
50' south east of the southeast corne							
Wire fence Around the well.							
			3.2	TAX	A CALLER AND A		
			1.000	1.200	DIA		
			17.	1/A Mail	DEC.		
			120	0	A UCOIGN CONTRACT		
Natable Land marks:				125-			
Notable Land marks:				A ST L	SF 4 Z C Borte		
				St. Com			
			1	STEN	AR 2006		
SKETCH			10.1	B.B.			
			1 Stan		MOLOIST AND STATES		
				AN A	N MERCEN		

The NGS Data Sheet

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

AJ6648 DESIGNATION - G 506 AJ6648 PID _ AJ6648 AJ6648 STATE/COUNTY- FL/OSCEOLA AJ6648 USGS QUAD - CYPRESS LAKE (1987) AJ6648 *CURRENT SURVEY CONTROL AJ6648 AJ6648 081 16 48. AJ6648* NAD 83(1986)- 28 04 00. SCALED (N) (W) AJ6648* NAVD 88 17.143 56.24 (meters) (feet) ADJUSTED AJ6648 GEOID HEIGHT-AJ6648 -27.62 (meters) GEOID03 AJ6648 DYNAMIC HT -17.117 (meters) 56.16 (feet) COMP AJ6648 MODELED GRAV-979,150.0 NAVD 88 (mgal) AJ6648 CLASS I AJT6648 VERT ORDER - SECOND AJ6648 AJ6648. The horizontal coordinates were scaled from a topographic map and have AJ6648.an estimated accuracy of +/- 6 seconds. AJ6648 AJ6648. The orthometric height was determined by differential leveling AJ6648.and adjusted by the National Geodetic Survey in April 2004.. AJ6648 AJ6648. The geoid height was determined by GEOID03. AJ6648 AJ6648.The dynamic height is computed by dividing the NAVD 88 AJ6648.geopotential number by the normal gravity value computed on the AJ6648.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45 AJ6648.degrees latitude (g = 980.6199 gals.). AJ6648 AJ6648. The modeled gravity was interpolated from observed gravity values. AJ6648 Units Estimated Accuracy MT (+/- 180 meters Scaled) AJT6648; East North AJ6648;SPC FL E 413,630. 172,480. AJ6648 AJ6648 SUPERSEDED SURVEY CONTROL AJ6648 AJ6648 No superseded survey control is available for this station. AJ6648 AJ6648_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM724046(NAD 83) AJ6648_MARKER: DD = SURVEY DISK AJ6648 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT AJ6648_STAMPING: G 506 2001 AJ6648_MARK LOGO: FLDEP AJ6648 MAGNETIC: N = NO MAGNETIC MATERIAL AJ6648_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO AJ6648+STABILITY: SURFACE MOTION AJ6648_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR AJ6648+SATELLITE: SATELLITE OBSERVATIONS - 2001 AJ6648 AJ6648 HISTORY - Date Condition Report By - 2001 AJ6648 HISTORY MONUMENTED FLDEP AJ6648 AJ6648 STATION DESCRIPTION AJT6648 AJ6648'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM) AJ6648'THE MARK IS ABOUT 28.5 MI (45.9 KM) EAST-NORTHWEST OF LAKE WALES, IN AJ6648'SECTION 12, TOWNSHIP 28 SOUTH, RANGE 30 EAST. TO REACH THE MARK FROM AJ6648'THE INTERSECTION OF STATE ROAD 27 AND STATE ROAD 60 IN LAKE WALES, GO AJ6648'EAST-SOUTHEAST ON STATE ROAD 60 FOR 7.3 MI (11.7 KM) TO THE JUNCTION AJ6648'OF MAMMOTH GROVE ROAD ON THE LEFT, TURN LEFT ON MAMMOTH GROVE ROAD AND AJ6648'GO NORTH FOR 2.05 MI (3.30 KM) TO THE JUNCTION OF CAMP MACK ROAD ON AJ6648'THE RIGHT, TURN RIGHT ON CAMP MACK ROAD AND GO NORTH FOR 0.25 MI (0.40 AJ6648'KM) TO A CURVE EAST, CONTINUE EAST ON CAMP MACK ROAD FOR 2.3 MI (3.7 AJ6648'KM) TO THE JUNCTION OF BARNEY KEEN ROAD (BOY SCOUT ROAD) ON THE RIGHT, AJ6648'CONTINUE NORTHEASTERLY ON CAMP MACK ROAD FOR 5.35 MI (8.61 KM) TO THE AJ6648'ENTRANCE TO LAKE KISSIMMEE STATE PARK ON THE RIGHT, CONTINUE NORTH ON





DATASHEETS

AJ6648'CAMP MACK ROAD FOR 0.1 MI (0.2 KM) TO THE JUNCTION OF A SAND ROAD ON AJ6648'THE RIGHT, TURN RIGHT ON THE SAND ROAD AND GO NORTHEAST FOR 75.0 FT AJ6648'(22.9 M) TO A LOCKED GATE, CONTINUE NORTHEAST ON THE SAND ROAD FOR AJ6648'0.35 MI (0.56 KM) TO A Y-JUNCTION, CONTINUE NORTHEAST ON THE SAND ROAD AJ6648'FOR 0.25 MI (0.40 KM) TO THE SOUTHWEST END OF A BRIDGE (SPANNING AJ6648'KISSIMMEE RIVER CANAL), CONTINUE NORTHEAST ON THE SAND ROAD FOR 3.2 AJ6648'MI (5.1 KM) TO A LOCKED GATE AND A 90 DEGREE TURN EAST, CONTINUE EAST AJ6648'ON THE SAND ROAD FOR 0.2 MI (0.3 KM) TO THE T-JUNCTION OF A SAND ROAD AJ6648'AND A POWER LINE, TURN LEFT ON THE SAND ROAD AND GO NORTHEAST FOR 75.0 AJ6648'FT (22.9 M) TO A LOCKED GATE, CONTINUE NORTHEAST ON THE SAND ROAD FOR AJ6648'FT (22.9 M) TO A LOCKED GATE, CONTINUE NORTHEAST ON THE SAND ROAD FOR AJ6648'T.0 MI (11.3 KM) TO THE MARK ON THE RIGHT, SET IN THE TOP OF A ROUND AJ6648'CONCRETE MONUMENT FLUSH WITH THE GROUND AND LEVEL WITH THE SAND ROAD. AJ6648'LOCATED 540.0 FT (164.6 M) NORTH OF A FENCE LEADING WEST THEN AJ6648'SAND ROAD, 1.5 FT (2.7 M) EAST OF THE APPROXIMATE CENTERLINE OF THE AJ6648'WATER MANAGEMENT DISTRICT, PHONE NUMBER 561-686-8800.

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

The NGS Data Sheet

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

```
AJ6649 DESIGNATION - H 506
AJ6649 PID - AJ664
          PID – AJ6649
STATE/COUNTY– FL/OSCEOLA
 AJ6649
 AJ6649
 AJ6649 USGS QUAD - CYPRESS LAKE (1987)
 AJ6649
                                         *CURRENT SURVEY CONTROL
 AJ6649
 AJ6649
                                                         081 16 42.
 AJ6649* NAD 83(1986)- 28 04 17.
                                                 (N)
                                                                              (W)
                                                                                        SCALED
 AJ6649* NAVD 88
                                                                             (feet)
                                       18.332
                                                (meters)
                                                                   60.14
                                                                                       ADJUSTED
 AJ6649
           GEOID HEIGHT-
 AJ6649
                                        -27.63 (meters)
                                                                                        GEOID03
           DYNAMIC HT -
                                         18.305 (meters)
 AJ6649
                                                                    60.06
                                                                             (feet)
                                                                                       COMP
                                  979,150.2
 AJT6649
          MODELED GRAV-
                                                                                       NAVD 88
                                                  (mgal)
 AJ6649
 AJ6649
           VERT ORDER - SECOND
                                           CLASS I
 AJ6649
 AJ6649. The horizontal coordinates were scaled from a topographic map and have
 AJ6649.an estimated accuracy of +/- 6 seconds.
 AJ6649
 AJ6649. The orthometric height was determined by differential leveling
 AJ6649.and adjusted by the National Geodetic Survey in April 2004..
 AJ6649
 AJ6649. The geoid height was determined by GEOID03.
 AJT6649
 AJ6649. The dynamic height is computed by dividing the NAVD 88
AJ6649.geopotential number by the normal gravity value computed on the
AJ6649.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AJ6649.degrees latitude (g = 980.6199 \text{ gals.}).
 AJ6649
 AJ6649. The modeled gravity was interpolated from observed gravity values.
 AJ6649
                                                                Units Estimated Accuracy
MT (+/- 180 meters Scaled)
 AJT6649;
                                                      East
                                    North
 AJ6649;SPC FL E
                                                  172,640.
                                414,150.
 AJ6649
 AJT6649
                                          SUPERSEDED SURVEY CONTROL
 AJ6649
 AJ6649.No superseded survey control is available for this station.
 AJ6649
 AJ6649_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM726051(NAD 83)
AJ6649_MARKER: DD = SURVEY DISK
 AJ6649_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 AJ6649_STAMPING: H 506 2001
AJ6649_MARK LOGO: FLDEP
 AJ6649 PROJECTION: FLUSH
 AJ6649_MAGNETIC: B = BAR MAGNET IMBEDDED IN MONUMENT
 AJ6649_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO AJ6649+STABILITY: SURFACE MOTION
 AJ6649_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AJ6649+SATELLITE: SATELLITE OBSERVATIONS - November 22, 2002
 AJ6649
 AJ6649
          HISTORY
                          - Date
                                         Condition
                                                               Report By
          HISTORY
HISTORY
                          - 2001
 AJ6649
                                         MONUMENTED
                                                               FLDEP
 AJ6649
                          - 20021122 GOOD
                                                               FLDEP
 AJT6649
                                          STATION DESCRIPTION
 AJ6649
 AJ6649
 AJ6649'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
 AJ6649'THE MARK IS ABOUT 28.9 MI (46.5 KM) EAST-NORTHWEST OF LAKE WALES, IN
AJ6649'SECTION 1, TOWNSHIP 28 SOUTH, RANGE 30 EAST. TO REACH THE MARK FROM
AJ6649'THE INTERSECTION OF STATE ROAD 27 AND STATE ROAD 60 IN LAKE WALES, GO
AJ6649'EAST-SOUTHEAST ON STATE ROAD 60 FOR 7.3 MI (11.7 KM) TO THE JUNCTION
 AJ6649'OF MAMMOTH GROVE ROAD ON THE LEFT, TURN LEFT ON MAMMOTH GROVE ROAD AND
AJ6649'GO NORTH FOR 2.05 MI (3.30 KM) TO THE JUNCTION OF CAMP MACK ROAD ON
AJ6649'THE RIGHT, TURN RIGHT ON CAMP MACK ROAD AND GO NORTH FOR 0.25 MI (0.40
 AJ6649'KM) TO A CURVE EAST, CONTINUE EAST ON CAMP MACK ROAD FOR 2.3 MI (3.7
 AJ6649'KM) TO THE JUNCTION OF BARNEY KEEN ROAD (BOY SCOUT ROAD) ON THE RIGHT,
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DATASHEETS

AJ6649'CONTINUE NORTHEASTERLY ON CAMP MACK ROAD FOR 5.35 MI (8.61 KM) TO THE AJ6649'ENTRANCE TO LAKE KISSIMMEE STATE PARK ON THE RIGHT, CONTINUE NORTH ON AJ6649'CAMP MACK ROAD FOR 0.1 MI (0.2 KM) TO THE JUNCTION OF A SAND ROAD ON AJ6649'THE RIGHT, TURN RIGHT ON THE SAND ROAD AND GO NORTHEAST FOR 75.0 FT AJ6649'(22.9 M) TO A LOCKED GATE, CONTINUE NORTHEAST ON THE SAND ROAD FOR AJ6649'0.35 MI (0.56 KM) TO A Y-JUNCTION, CONTINUE NORTHEAST ON THE SAND ROAD AJ6649'FOR 0.25 MI (0.40 KM) TO THE SOUTHWEST END OF A BRIDGE (SPANNING AJ6649'KISSIMMEE RIVER CANAL), CONTINUE NORTHEAST ON THE SAND ROAD FOR 3.2 AJ6649'MI (5.1 KM) TO A LOCKED GATE AND A 90 DEGREE TURN EAST, CONTINUE EAST AJ6649'ON THE SAND ROAD FOR 0.2 MI (0.3 KM) TO THE T-JUNCTION OF A SAND ROAD AJ6649'AND A POWER LINE, TURN LEFT ON THE SAND ROAD AND GO NORTHEAST FOR 75.0 AJ6649'FT (22.9 M) TO A LOCKED GATE, CONTINUE NORTHEAST ON THE SAND ROAD FOR AJ6649'7.4 MI (11.9 KM) TO THE SOUTH END OF A BRIDGE SPANNING CANAL C-34 AND AJ6649'A LOCKED GATE ON THE RIGHT, TURN RIGHT ON THE LIMEROCK ROAD AND GO AJ6649'EAST FOR 0.05 MI (0.08 KM) TO THE MARK ON THE RIGHT, SET IN THE TOP OF AJ6649'A ROUND CONCRETE MONUMENT RECESSED 0.4 FT (12.2 CM) BELOW THE LEVEL OF AJ6649'THE GROUND AND 1.0 FT (0.3 M) ABOVE THE LEVEL OF THE LIMEROCK ROAD. AJ6649'LOCATED 240.0 FT (73.2 M) SOUTHEAST OF THE SOUTHEAST CORNER OF A AJ6649'WOODEN BRIDGE SPANNING CANAL 34, 167.0 FT (50.9 M) SOUTHEAST OF A AJ6649'METAL GATE, 120.2 FT (36.6 M) SOUTH OF THE SOUTH EDGE OF THE CANAL, AJ6649'82.5 FT (25.1 M) SOUTH OF THE APPROXIMATE CENTERLINE OF THE LIMEROCK AJ6649'ROAD, 65.5 FT (20.0 M) WEST-NORTHWEST OF THE MOST WEST PINE TREE (A AJ6649'ROW OF PINE) , 1.8 FT (0.5 M) NORTH OF A BARBWIRE FENCE AND 1.2 FT AJ6649'(0.4 M) NORTH OF A CARSONITE WITNESS POST. NOTE A BAR MAGNET WAS AJ6649'IMBEDDED IN THE MONUMENT ON THE SOUTH SIDE, 0.2 FT (6.1 CM) BELOW THE AJ6649'TOP OF THE MONUMENT. NOTE FOR KEY CONTACT SOUTH FLORIDA WATER AJ6649'MANAGEMENT DISTRICT, PHONE NUMBER 561-686-8800. AJ6649 AJT6649 STATION RECOVERY (2002) AJ6649 AJ6649'RECOVERY NOTE BY FL DEPT OF ENV PRO 2002 (JLM) AJ6649'RECOVERED IN GOOD CONDITION.

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