Specific Purpose Survey of the Monitoring Wells
OSF-53

Osceola County, Florida

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

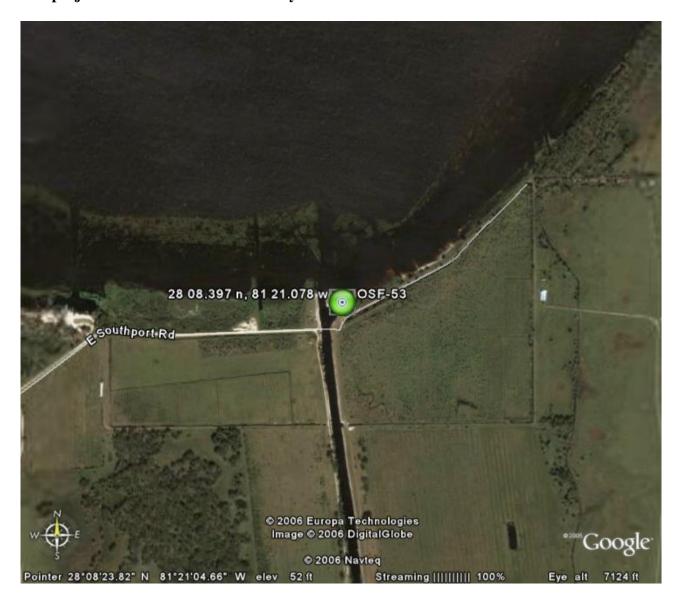
Purpose	1
Project location	1
Deliverables	2
Datum	2
Leveling Methods	2
Vertical Control	3
Project Results	4-5
Project Photos	6-11
Surveyor's Certificate	12

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-53 was constructed at the site. The elevations were established from Benchmark C 513 using a Topcon DL-102C Digital Level and adjusted using Tripod Data Systems Survey Link DC with Geodetic and Digital Level modules 7.5.5.

VERTICAL CONTROL

BM C 513	Elevation:	NAVD 1988	60.57'	NGVD 1929	
Found in National Geodetic Survey Database	Latitude	28°08'19" (Scaled)			
State/County FL/Osceola	Longitude	81°21'39" (Scaled)			
USGS QUAD St. Cloud South (1980)					
Horiz. Order (Preliminary) Class (Preliminary)		DESCRIBED BY FL		` ,	16D D FEE



DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM) THE MARK IS ABOUT 17.5 MI SOUTHWEST OF KISSIMMEE, IN SECTION 13, TOWNSHIP 27 SOUTH, RANGE 29 EAST. TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 192 (VINE STREET) AND U.S. HIGHWAY 17, 92 (JOHN YOUNG PARKWAY) IN KISSIMMEE, GO SOUTH ON U.S. HIGHWAY 17, 92 FOR 3.5 MI TO THE JUNCTION OF PLEASANT HILL ROAD (COUNTY ROAD 531) ON THE LEFT, TURN LEFT ON PLEASANT HILL ROAD (COUNTY ROAD 531) AND GO SOUTH FOR 7.55 MI TO THE JUNCTION OF SOUTHPORT ROAD ON THE LEFT, TURN LEFT ON SOUTHPORT ROAD AND GO EAST FOR 5.5 MI TO THE MARK ON THE LEFT, SET IN THE TOP OF A ROUND CONCRETE MONUMENT FLUSH WITH THE GROUND AND ABOUT LEVEL WITH SOUTHPORT ROAD. LOCATED 44.0 FT SOUTHWEST OF THE ENTRANCE TO SOUTHPORT PARK AT 2001, 43.3 FT NORTHWEST OF THE CENTERLINE OF SOUTHPORT ROAD, 13.0 FT NORTH-NORTHWEST OF THE WEST END OF A SOUTHPORT PARK SIGN, 7.6 FT NORTHWEST OF A METAL LIGHT POLE, 3.0 FT WEST OF A 5-FOOT TALL CHAINLINK FENCE AND 1.0 FT SOUTHEAST OF A FENCE AND A CARSONITE WITNESS POST.

NOTE A MAGNET WAS IMBEDDED IN THE MONUMENT ON THE SOUTH SIDE.

PROJECT RESULTS

Monitoring Well (GW-1)	Monitoring Well (GW-2)
Monitoring Well OSF-53: Reference mark: Set mark on N. side PVC pipe With initials K&S.	Monitoring Well OSF-53: Reference mark: Set mark on N. side PVC pipe With initials K&S.
New Reference Mark El. <u>64.928'</u> (NGVD '29) (<u>Wrote -1.043' to NAVD 1988</u>).	New Reference Mark El. <u>63.685'</u> (NGVD '29) (<u>Wrote -1.043' to NAVD 1988</u>).
Initials: <u>K&S</u>	Initials: <u>K&S</u>
<u>B.M., R.F., R.C</u>	<u>B.M., R.F., R.C</u>
Date: 7/28/06	Date: 7/28/06
written at the mark:	written at the mark:
El. <u>64.72'</u> Date: <u>11/28/01</u> By: <u>Hydrogage Inc.</u>	El. <u>63.51'</u> Date: <u>11/28/01</u> By: <u>Hydrogage Inc.</u>
Reference Mark location:	Reference Mark location:
Top of PVC Pipe	Top of PVC Pipe

PROJECT RESULTS

Monitoring Well (GW-3)

Monitoring Well OSF-53:

Reference mark:

Set mark on N. side PVC pipe

With initials K&S.

New Reference

Mark El. **64.609**'

(NGVD '29)

(Wrote -1.043' to NAVD 1988).

Initials:

K&S

B.M., **R.F.**, **R.C**

Date:

7/28/06

written at the mark:

El. **64.40**'

Date: 11/28/01

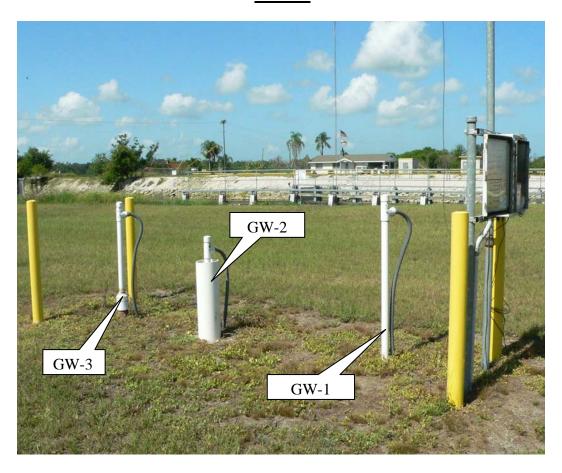
By: **Hydrogage Inc.**

Reference Mark location:

Top of PVC Pipe

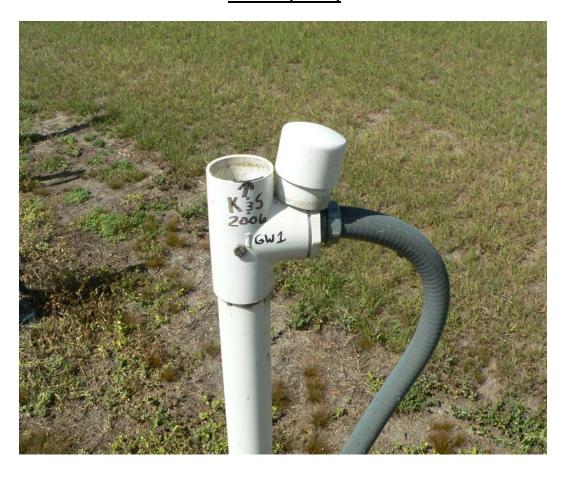
PROJECT PHOTO

OSF-53



PROJECT PHOTO

OSF-53 (GW-1)



PROJECT PHOTO

OSF-53 (GW-2)



PROJECT PHOTO

OSF-53 (GW-3)



PROJECT PHOTO

OSF-53



PROJECT PHOTO

OSF-53





Comments:

Party Chief: B. Miller Field Book: 1156 Page 24

Bench Mark: "C 513" El. 60.57', Vertical Datum: NAVD1988

Offset: <u>1.043'</u> SFWMD VALUE (add this value to convert to NGVD 1929) Offset: <u>1.043'</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 28, 2006

Kenneth T. Glass, PSM Professional Surveyor and Mapper State of Florida Certificate No. 5713

```
0SF 53. gen
Ci tati on_I nformati on:
           Originator: Kenneth T. Glass, P.S.M. (ed.)
Publication_Date: 20060728
Publication_Time: Unknown
Title: S.F.W.M.D. Monitoring Well
Edition: OSF-53
           Seri es_I nformati on:
           Publication_Information:
                      Publication_Place: Not Published
           Publisher: None
Online_Linkage: kglass@keithandschnars.com
Larger_Work_Citation:
                      Citation_Information:
                                 Series_Information:
                                 Publication_Information:
           South Florida Water Management District
           Structure OSF-53
           To establish reference elevations in NAVD 1988 and
           NGVD 1929 datum at the Monitoring Well(s).
Time_Peri od_Information:
           Si ngl e_Date/Ti me:
                      Calendar_Date: 20060728
           Range_of_Dates/Times:
           Mul ti pl e_Dates/Ti mes:
Currentness_Reference: Publication Date
Maintenance_and_Update_Frequency: Unknown
Boundi ng_Coordi nates:
           West_Bounding_Coordinate: 81°21'04.7"
East_Bounding_Coordinate: 81°21'04.7"
           North_Bounding_Coordinate: 28°08' 23.8"
South_Bounding_Coordinate: 28°08' 23.8"
           Theme_Keyword_Thesaurus: Specific Purpose Survey
           Place_Keyword: S. F. W. M. D. Monitoring Well OSF-53
Place_Keyword: SEC. 18 - T27S - R30E
```

Theme:

Identification_Information: Ci tati on:

Description:

Status:

Keywords:

Spati al _Domai n:

Abstract:

Purpose:

Time_Period_of_Content:

Theme_Keyword: Monitoring Well(s)

PI ace:

Place_Keyword_Thesaurus: Osceola County

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:

Contact_Information:

Progress: Complete

Contact_Person_Pri mary:

Contact_Person: Howard J. Ehmke

Contact_Organization: South Florida Water Management

District

Contact_Organization_Primary:

Contact_Position: P.S.M.

Contact_Address:

Address_Type: mailing and physical address

Address:

Page 1

```
Acceler 8
                                                     Suite 150
                                                     2301 Centerpark West Drive
                                          City: West Palm Beach
                                          State_or_Province: Florida
Postal_Code: 33409
                                          Country: USA
                               Contact_Voi ce_Tel ephone: (561) 242-5520 ext 4064
                               Contact_Electronic_Mail_Address: hehmke@sfwmd.gov
                               Hours_of_Service: 8:00 am to 5:00 pm EST
          Securi ty_Information:
          Cross_Reference:
                    Ci tati on_I nformati on:
                               Seri es_I nformati on:
                               Publication_Information:
Data_Quality_Information:
          Attri bute_Accuracy:
                     Attri bute_Accuracy_Report:
                               The horizontal location of the benchmark was taken from a
                               hand held G.P.S. unit. The vertical data was collected
                               using a Wild DL-102C 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:
                    64.928' (NGVD 1929) OSF-53 Well (GW-1) .
Offset written at wells (-) 1.043' to NAVD 1988.
                    63.\,685' (NGVD 1929) OSF-53 WeII (GW-2) . Offset written at wells (-) 1.043' to NAVD 1988.
                    64.\,609' (NGVD 1929) OSF-53 WeII (GW-3) . Offset written at wells (-) 1.043' to NAVD 1988.
                     OSF-53 2006 was the site benchmark used for this
          survey. NAVD 1988 elevation 60.365'
Positional_Accuracy:
Horizontal_Positional_Accuracy:
                               Horizontal_Positional_Accuracy_Report:
The horizontal position of the benchmark
                               was established using a hand held GPS.
Quantitative_Horizontal_Positional_Accuracy_Assessment:
                                          Horizontal_Positional_Accuracy_Value: Lat.
28°08' 23. 8" Long. 81°21' 04. 7"
                                          Horizontal_Positional_Accuracy_Explanation: Value
derived by hand-held GPS unit.
                     Vertical_Positional_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: 0.001 ft. NAVD88
Vertical_Positional_Accuracy_Explanation: Better
than 0.03ft. x sq. root of miles of the level loop.
          Li neage:
                     Source_Information:
                               Source_Ci tati on:
                                          Ci tati on_Informati on:
                                                     Seri es_I nformati on:
                                                    Publication_Information:
                                                   Page 2
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                                              Larger_Work_Ci tation:
                                                        Ci tati on_Informati on:
                                                                 Seri es_Information:
                                                                 Publication_Information:
                            Source_Time_Period_of_Content:
                                     Time_Period_Information:
                                              Si ngl e_Date/Ti me:
                                              Range_of_Dates/Times:
                                              Mul ti pl e_Dates/Ti mes:
                  Process_Step:
                            Process_Description:
                                     Differential leveling was performed using a Wild
NA-2 level.
                                     The onsite bench mark OSF53 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.
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                                              Contact_Person_Primary:
                                              Contact_Organization_Primary:
Contact_Address:
Spatial _Data_Organization_Information:
         Spatial_Reference_Information:
                  Hori zontal _Coordi nate_System_Defi ni ti on:
                            Geographic:
                                     Lati tude_Resolution: 28°08' 23.8"
                                     Longi tude_Resolution: 81°21'04.7"
                                     Geographic_Coordinate_Units: Degrees, minutes, and
decimal seconds
                            Geodetic_Model:
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                            Altitude_System_Definition:
                            Depth_System_Definition:
Entity_and_Attribute_Information:
         Detailed_Description:
                  Enti ty_Type:
                  Attri bute
                            Attribute_Domain_Values:
                            Attri bute_Val ue_Accuracy_I nformati on:
         Overview_Description:
Distribution_Information:
         Di stri butor:
                  Contact_Information:
                            Contact_Person_Pri mary:
Contact_Organi zați 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 Lakeland
                            Contact_Address:
                                     Address_Type: mailing and physical address
Address: 2525 Drane Field Rd., Suite 7
                                     City: Lakel and
                           State_or_Province: Florida
Postal_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
                                             Page 3
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                    Digital_Form:
                              Di gi tal _Transfer_I nformati on:
Di gi tal _Transfer_Opti on:
                                        Online_Option:
Computer_Contact_Information:
                                                             Network_Address:
                                                             Di al up_l nstructi ons:
                                        OffLi ne_Opti on:
                                                   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_Organization: Keith and Schnars, P.A.
                              Contact_Organization_Primary:
Contact_Position: Director of Surveying and Mapping Lakeland
                              Contact_Address:
                                        Address_Type: mailing and physical address
Address: 2525 Drane Field Rd., Suite 7
                                        City: Lakel and
                                        State_or_Province: FL
                                        Postal_Code: 33811
                              Country: USA
Contact_Voi ce_Tel ephone: (863) 646-4771
Contact_Facsi mile_Tel ephone: (863) 646-3378
                              Contact_El ectronic_Mail_Address: kgl ass@kei thandschnars.com
          Hours_of_Service: 8:00 am to 5:00 pm EST
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial
Metadata
          Metadata_Standard_Version: 19940608
          Metadata_Securi ty_Information:
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SOUTH FLORIDA WATER MANAGEMENT DISTRICT

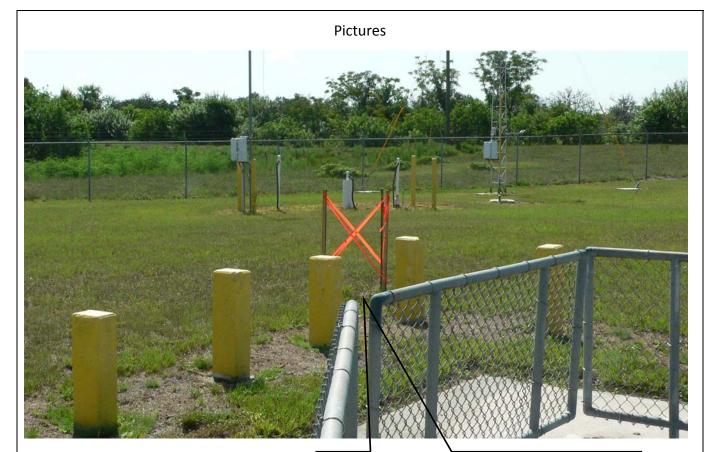
Rev. 4/01

					11011 1101	
COUNTY	PROJECT		DESIGNATION			
OSCEOLA			Structure OSF-53			
SECTION 18	TOWNSHIP 27	TOWNSHIP 27 SOUTH		RANGE 30 EAST		
GEOGRAPHIC INDEX OF QUAD						
Established by KEITH AND SCHN	<u>ARS</u>	NAMI	E OF QUADRA	NGLE		
Recovered by		ST. C	LOUD SOUTH	<u>l</u>		
SET CLASS "C" MONUNENT WITH SFWMD BRASS DISK.						
SURVEYOR B. MILLER (Keith and DATE 06/22/2006	l Schnars)	FIELD BOOK, 1156, pgs. 24				
HORIZONTAL DATUM: 1983 wit	h 1999 correcti	on,	ZONE East			
VERTICAL DATUM: NGVD 192	9 and NAVD	1988				
CONTROL ACCURACY: HORIZO	ONTAL HAND-HEL	D GPS	S, 3 rd Order V	ERTICAL		
STATE PLANE COORDINATES	X = 542949		Y = 1383747		EL. (NGVD 1929)	
					61.408'	
					EL. (NAVD 1988)	
					60.365'	
LATITUDE <u>28º 08' 23.8"</u>			LC	NGITUDE	81º 21' 04.7"	
	DESC	CRIPTIC	ON			
South Florida Water Management D	strict brass disk se	t in con	crete monume	nt stampe	d OSF 53 / 2006	
The benchmark is located at the sou						
To reach the mark from the intersect						
Pleasant Hill Rd. a distance of 7.5 m W. Southport Rd. a distance of 5.3 n						
Access road a distance of 0.6 miles					•	
Lock gate and 27.5' south east of the south east corner of a block pump building.						
Notable Land marks:						



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01





The NGS Data Sheet

```
See file dsdata.txt for more information about the datasheet.
```

```
DF6712 DESIGNATION - C 513
        PID - DF6712
STATE/COUNTY- FL/OSCEOLA
 DF6712
DF6712
        USGS QUAD - ST CLOUD SOUTH (1980)
 DF6712
 DF6712
                                  *CURRENT SURVEY CONTROL
DF6712
DF6712
 DF6712* NAD 83(1986)- 28 08 19.
                                       (N)
                                               081 21 39.
                                                                (W)
                                                                        SCALED
 DF6712* NAVD 88
                                18.462 (meters)
                                                       60.57
                                                                        ADJUSTED
                                                                (feet)
DF6712
        GEOID HEIGHT-
DF6712
                                 -27.66 (meters)
                                                                        GEOID03
 DF6712
         DYNAMIC HT -
                                  18.434 (meters)
                                                        60.48
                                                                (feet)
                                                                        COMP
DF6712
         MODELED GRAV-
                            979,153.2
                                                                        NAVD 88
                                          (mgal)
 DF6712
         VERT ORDER - SECOND
 DF6712
                                    CLASS T
DF6712
DF6712. The horizontal coordinates were scaled from a topographic map and have
 DF6712.an estimated accuracy of +/- 6 seconds.
DF6712. The orthometric height was determined by differential leveling
 DF6712.and adjusted by the National Geodetic Survey in April 2004..
 DF6712
DF6712. The geoid height was determined by GEOID03.
 DF6712
DF6712. The dynamic height is computed by dividing the NAVD 88 DF6712. geopotential number by the normal gravity value computed on the DF6712. Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 DF6712.degrees latitude (g = 980.6199 gals.).
 DF6712
DF6712. The modeled gravity was interpolated from observed gravity values.
 DF6712
 DF6712;
                                                     Units Estimated Accuracy
   MT (+/- 180 meters Scaled)
                             North
                                            East
DF6712;SPC FL E
                          421,620.
                                         164,560.
DF6712
 DF6712
                                   SUPERSEDED SURVEY CONTROL
 DF6712
DF6712 No superseded survey control is available for this station.
 DF6712
 DF6712 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM645126(NAD 83)
 DF6712_MARKER: DD = SURVEY DISK
 DF6712_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 DF6712_STAMPING: C 513 2001
 DF6712_MARK LOGO: FLDEP
DF6712 PROJECTION: FLUSH
 DF6712_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
 DF6712 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DF6712+STABILITY: SURFACE MOTION
 DF6712_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 DF6712+SATELLITE: SATELLITE OBSERVATIONS - June 28, 2001
DF6712
 DF6712
         HISTORY
                      - Date
                                  Condition
                                                    Report By
                      - 20010628 MONUMENTED
 DF6712 HISTORY
 DF6712
DF6712
                                   STATION DESCRIPTION
DF6712
 DF6712'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
DF6712'THE MARK IS ABOUT 17.5 MI SOUTHWEST OF KISSIMMEE, IN SECTION 13,
 DF6712'TOWNSHIP 27 SOUTH, RANGE
 DF6712'29 EAST.
 DF6712'
DF6712'TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 192 (VINE STREET)
 DF6712'AND U.S. HIGHWAY
DF6712'17, 92 (JOHN YOUNG PARKWAY) IN KISSIMMEE, GO SOUTH ON U.S. HIGHWAY 17, DF6712'92 FOR 3.5 MI TO THE
 DF6712'JUNCTION OF PLEASANT HILL ROAD (COUNTY ROAD 531) ON THE LEFT, TURN
 DF6712'LEFT ON PLEASANT HILL
```

Elapsed Time = 00:00:00

DF6712'ROAD (COUNTY ROAD 531) AND GO SOUTH FOR 7.55 MI TO THE JUNCTION OF DF6712'SOUTHPORT ROAD ON DF6712'THE LEFT, TURN LEFT ON SOUTHPORT ROAD AND GO EAST FOR 5.5 MI TO THE DF6712'MARK ON THE LEFT, DF6712'SET IN THE TOP OF A ROUND CONCRETE MONUMENT FLUSH WITH THE GROUND AND DF6712'ABOUT LEVEL DF6712'WITH SOUTHPORT ROAD. DF6712' DF6712'LOCATED 44.0 FT SOUTHWEST OF THE ENTRANCE TO SOUTHPORT PARK AT 2001, DF6712'43.3 FT DF6712'NORTHWEST OF THE CENTERLINE OF SOUTHPORT ROAD, 13.0 FT NORTH-NORTHWEST DF6712'OF THE WEST DF6712'END OF A SOUTHPORT PARK SIGN, 7.6 FT NORTHWEST OF A METAL LIGHT POLE, DF6712'3.0 FT WEST OF A
DF6712'5-FOOT TALL CHAINLINK FENCE AND 1.0 FT SOUTHEAST OF A FENCE AND A DF6712'CARSONITE WITNESS POST. DF6712' DF6712'NOTE A MAGNET WAS IMBEDDED IN THE MONUMENT ON THE SOUTH SIDE. DF6712' DF6712' DF6712' *** retrieval complete.

BM C 513.htm[1/17/2016 4:49:52 AM]

The NGS Data Sheet

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

```
DF6745 DESIGNATION - OS 129
 DF6745
         PID
                         DF6745
DF6745
         STATE/COUNTY- FL/OSCEOLA
DF6745
         USGS QUAD - ST CLOUD SOUTH (1980)
 DF6745
                                  *CURRENT SURVEY CONTROL
DF6745
DF6745
DF6745* NAD 83(1986) - 28 08 18.
                                        (N)
                                                081 21 06.
                                                                 (W)
                                                                          SCALED
DF6745* NAVD 88
                                18.573 (meters)
                                                        60.93
                                                                         ADJUSTED
                                                                 (feet)
DF6745
         GEOID HEIGHT-
                                 -27.68 (meters)
DF6745
                                                                          GEOID03
 DF6745
         DYNAMIC HT -
                                  18.545 (meters)
                                                         60.84
                                                                 (feet)
                                                                          COMP
DF6745
         MODELED GRAV-
                             979,153.3
                                                                         NAVD 88
                                          (mgal)
 DF6745
         VERT ORDER - SECOND
DF6745
                                    CLASS T
DF6745
DF6745. The horizontal coordinates were scaled from a topographic map and have
 DF6745.an estimated accuracy of +/- 6 seconds.
DF6745. The orthometric height was determined by differential leveling
 DF6745.and adjusted by the National Geodetic Survey in April 2004..
 DF6745
DF6745. The geoid height was determined by GEOID03.
 DF6745
DF6745. The dynamic height is computed by dividing the NAVD 88 DF6745. geopotential number by the normal gravity value computed on the DF6745. Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 DF6745.degrees latitude (g = 980.6199 gals.).
 DF6745
DF6745. The modeled gravity was interpolated from observed gravity values.
 DF6745
 DF6745;
                                             East
                                                      Units Estimated Accuracy
                              North
DF6745; SPC FL E
                                                             (+/- 180 meters Scaled)
                           421,590.
                                          165,460.
                                                         MΤ
DF6745
DF6745
                                   SUPERSEDED SURVEY CONTROL
 DF6745
DF6745 No superseded survey control is available for this station.
 DF6745
DF6745_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM654125(NAD 83) DF6745_MARKER: DD = SURVEY DISK
 DF6745_SETTING: 40 = SET IN A LARGE STRUCTURE WITH DEEP FOUNDATIONS
DF6745_SP_SET: WATER STRUCTURE
DF6745_STAMPING: SFWMD BM OS-129 1981
DF6745 MARK LOGO: USE
 DF6745_MAGNETIC: N = NO MAGNETIC MATERIAL
DF6745_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD DF6745+STABILITY: POSITION/ELEVATION WELL
 DF6745_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 DF6745+SATELLITE: SATELLITE OBSERVATIONS - July 20, 2001
DF6745
 DF6745
         HISTORY
                      - Date
                                  Condition
                                                     Report By
         HISTORY
 DF6745
                      - 1981
                                  MONUMENTED
                                                     USE
 DF6745
         HISTORY
                      - 20010720 GOOD
                                                     FLDEP
DF6745
                                   STATION DESCRIPTION
DF6745
 DF6745
DF6745'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
 DF6745'THE MARK IS ABOUT 17.5 MI SOUTHWEST OF KISSIMMEE, IN SECTION 18,
 DF6745'TOWNSHIP 27 SOUTH, RANGE
 DF6745'30 EAST.
DF6745'
 DF6745'TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 192 (VINE STREET)
 DF6745'AND U.S. HIGHWAY
DF6745'17, 92 (JOHN YOUNG PARKWAY) IN KISSIMMEE, GO SOUTH ON U.S. HIGHWAY 17,
 DF6745'92 FOR 3.5 MI TO THE
 DF6745'JUNCTION OF PLEASANT HILL ROAD (COUNTY ROAD 531) ON THE LEFT, TURN
```

Elapsed Time = 00:00:00

```
DF6745'LEFT ON PLEASANT HILL
DF6745'ROAD (COUNTY ROAD 531) AND GO SOUTH FOR 7.55 MI TO THE JUNCTION OF
DF6745'SOUTHPORT ROAD ON
DF6745'THE LEFT, TURN LEFT ON SOUTHPORT ROAD AND GO EAST FOR 6.0 MI TO THE
DF6745'END OF THE PAVEMENT
DF6745'AND A PRIVATE POSTED GATE, CONTINUE EAST ON THE SHELL ROAD FOR 0.5 MI
DF6745'TO A GATE,
DF6745'CONTINUE NORTHEAST ON STRUCTURE ROAD FOR 0.05 MI TO THE MARK ON THE
DF6745'MARK RIGHT, SET IN
DF6745'THE TOP OF THE SOUTHEAST STRUCTURE WALL ABOUT LEVEL WITH THE ROAD.
DF6745'
DF6745'LOCATED 9.5 FT SOUTH OF THE APPROXIMATE CENTERLINE OF THE STRUCTURE
DF6745'ROAD, 1.9 FT WEST
DF6745'OF A METAL GUARDRAIL AND 0.9 FT EAST OF A 4-FOOT TALL CHAINLINK FENCE
DF6745'
DF6745'
DF6745'
DF6745'
DF6745'
```

Closure Report for file V:\PROJECTS-NEW FORMAT\16434.07 - SFWMD - Monitoring Well Sites\TASK 2

Job No. / Task No. : 1643407 / 22003 OSF 53 BENCHRUN

Benchmark No. : C 513
Starting BM Elev. : 60.570
Ending BM Elev. : 60.930
Unadjusted Ending Elev.: 60.929
Closure Error : -0.001
Length of Level Run : 3,889.480
Allowable Error : 0.026
Units : Feet

Closure is within allowable tolerances

Adjustment proportional to total distance

	Pt.#	Unadj. Elev.	Adj. Elev.	Description
==	======	========	=========	
	C 513	60.570		
	TBM1	61.188	61.188	
	TBM2	60.336	60.336	
	TBM3	60.519	60.519	
	TBM4	60.585	60.585	
	TBM5	61.207	61.208	
	TBM6	60.411	60.412	
	TBM7	61.927	61.928	
	TBM8	61.141	61.142	
	TBM9	61.819	61.820	
BM	OSF 53	60.364	60.365	
	TBM10	61.774	61.775	
	OS 129	60.929	60.930	

Closure Report for file V:\PROJECTS-NEW FORMAT\16434.07 - SFWMD - Monitoring Well Sites\TASK 2

```
: 1643407 / 22003 OSF 53 BENCHRUN
Job No. / Task No.
Benchmark No.
                       : OS 129
Starting BM Elev.
                      : 60.930
Ending BM Elev.
                       : 60.570
Unadjusted Ending Elev.: 60.550
Closure Error
                     : -0.020
Length of Level Run
                    : 3,625.060
Allowable Error
                      : 0.025
Units
                       : Feet
```

Closure is within allowable tolerances

Adjustment proportional to total distance

Pt.#	Unadj. Elev.	Adj. Elev.	Description
=======		=========	==========
OS 129	60.930		
TBM11	60.979	60.981	
TBM12	61.165	61.170	
TBM13	61.367	61.374	
TBM14	61.263	61.273	
TBM15	61.858	61.870	
TBM16	61.577	61.592	
TBM17	60.666	60.683	
C 513	60.550	60.569	