```
Identification_Information:
        Citation:
                Citation_Information:
                        Originator: Darren Townsend(ed.)
                        Publication_Date: 20050518
                        Publication_Time: Unknown
                        Title: S.F.W.M.D. Well  Snively's Ranch
                        Series_Information:
                        Publication_Information:
                                Publication_Place: 20050518
                                Publisher: None
                        Online_Linkage: darrent@cooner.com
                        Larger_Work_Citation:
                                Citation_Information:
                                        Series_Information:
                                        Publication_Information:
        Description:
                Abstract:
                        South Florida Water Management District
                        Well Snively's Ranch
                Purpose:
                        To establish NAVD 88 and NGVD 29 elevations on the
                        wells reference marks from nearby, existing benchmarks.
                Supplemental_Information:
                        ACCOMPANYING DIGITAL FILES
                        SNIVELYS.GEN , CORPSMET95 FILE
                        SNIVELYS.DOC , BENCHMARK RECOVERY FORM
                        SNIVELYS.PDF , SCANNED COPIES OF FIELD NOTES,
                        VERTCON CALCULATONS (IF APPLICABLE)
                        AND LEAST SQUARES ADJUSTMENT
                        SNIVELYS.PPT , POWER POINT FILES OF WELL SITE
                        PICTURES
        Time_Period_of_Content:
                Time_Period_Information:
                        Single_Date/Time:
                        Range_of_Dates/Times:
                                Beginning_Date: 20050329
                                Ending_Date: 20050329
                        Multiple_Dates/Times:
                Currentness_Reference: Publication Date
        Status:
                Progress: Complete
                Maintenance_and_Update_Frequency: Unknown
        Spatial_Domain:
                Bounding_Coordinates:
                        West_Bounding_Coordinate: -081°25'03.45"
                        East_Bounding_Coordinate: -081°25'03.42"
                        North_Bounding_Coordinate: +27°58'16.60"
                        South_Bounding_Coordinate: +27°58'16.56"
        Keywords:
                Theme:
                        Theme_Keyword_Thesaurus: None
                        Theme_Keyword: Record Survey
                        Theme_Keyword: Well Site
                Place:
                        Place_Keyword_Thesaurus: None
                        Place_Keyword: SWFMD WELL SNIVELY'S RANCH
                        Place_Keyword: SEC.9, TWP 29 S, RGE 29 E
                        Place_Keyword: POLK COUNTY FLORIDA
                Stratum:
                Temporal:
        Access_Constraints: None
        Use_Constraints:
                The wells have keyed  or combination locks.
                See point of contact for key or combination.
        Point_of_Contact:
                Contact_Information:
                        Contact_Person_Primary:
                                Contact_Person: Elvie D. Ebanks
                                Contact_Organization: South Florida Water Management
```

Darren Townsend
Cooner & Associates

Purpose

Survey Date

Elvie Ebanks
SFWMD

District
Contact_Organization_Primary:
Contact_Position: Professional Surveyor & Mapper
Contact_Address:
Address_Type: mailing and physical address
Address: 3301 Gun Club Road
City: West Palm Beach
State_or_Province: Florida
Postal_Code: 33406
Country: USA
Contact_Voice_Telephone: (561) 753-2400, Ext. 4717
Contact_Electronic_Mail_Address: eebanks@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:

Equipment Used

The horizontal location of the wells and benchmark was performed using differentially corrected TRIMBLE GPS PATHFINDER PRO XR reciever. The vertical data was collected using a LEICA NA3003 electronic digital level. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/99. Elevations are based on NAVD 88.

Logical_Consistency_Report:
Horizontal data was established using differentially corrected GPS signals from U.S. Coast Guard Beacon at Cape Canaveral. Vertical data was established using existing NGS benchmarks PO9 and K106.
Completeness_Report:
Horizontal location taken at approximate center of well.

Project Results

Well SNIVELY'S RANCH
Lat. +27°58'16.60"
Long. -081°25'03.42"
N 1322492.373'
E 521369.501"
Elevation taken on top of pipe extending vertically above well platform at tip of black arrow.
69.25' (NAVD 88)
70.46' (NGVD 29) calculated using 1.21' offset value based on
superseded NGVD 29 elevation posted on NGS datasheet for benchmark PO9.
NEW SITE BENCHMARK
SNRH5 is a standard SFWMD aluminum disk set in top of a class "C" concrete monument, flush with the ground. A magnet was set on the south side of the mark. From the intersection of State Road 60 & State Road 630, go NW on State Road 60.
Take right on Boy Scout Camp Road. Take right on Camp Mack Road to a gravel road on the left, just past the "R&R Turf Farm" sign. Go ~1.2 miles to mark on the right.
Lat. +27°58'16.56"
Long. -081°25'03.45"
N 1322488.460'
E 521366.648'
65.43' (NAVD 88)
66.64' (NGVD 29) calculated using 1.21' offset value based on
superseded NGVD 29 elevation posted on NGS datasheet for benchmark PO9.
EXISTING BENCHMARK POL 16
63.32' (NAVD 88) posted SFWMD database
63.36' (NAVD 88) measured for this project
64.57' (NGVD 29) calculated using 1.21' offset value based on

```
                superseded NGVD 29 elevation posted on NGS datasheet
                for  benchmark PO9.
                64.52' (NGVD 29) posted SFWMD database
        Positional_Accuracy:
                Horizontal_Positional_Accuracy:
                        Horizontal_Positional_Accuracy_Report:
                                The horizontal positions of the well and benchmark
                                SNRH5 were established with differentially
                                corrected GPS signals from U.S. Coast Guard Beacon at
                                Cape Canaveral.
                        Quantitative_Horizontal_Positional_Accuracy_Assessment:
                                Horizontal_Positional_Accuracy_Value: sub meter
                                Horizontal_Positional_Accuracy_Explanation: The intended
positional accuracy for this survey is sub meter.
                Vertical_Positional_Accuracy:
                        Vertical_Positional_Accuracy_Report:
                                A level line was run originating on NGS benchmark PO9
                                with an NAVD 88 elevation and running through
                                existing bencmarks KI07 and POL16, through Army
                                Corps of Engineers bechmarks KR 1833 and 1832
                                and through new site
                                benchmark SNRH5 and terminating on NGS benchmark
                                K106 in accordance with Florida Minimum Technical
                                Standards (Chapter 61G17-6).  The well platform was then
                                elevated by a level line originating on new site benchmark
                                SNRH5 with an newly established NAVD 88 elevation
                                running through pipe extending above well platform and
                                terminating on new site
                                benchmark SNRH5 in accordance with Florida Minimum
                                Technical Standards (Chapter 61G17-6).
                        Quantitative_Vertical_Positional_Accuracy_Assessment:
                                Vertical_Positional_Accuracy_Value: 0.006 ft
                                Vertical_Positional_Accuracy_Explanation: NAVD 88 level
run, 0.006 ft closure in 17912.2 ft, max. allowed 0.055 ft (MTS)
                        Quantitative_Vertical_Positional_Accuracy_Assessment:
                                Vertical_Positional_Accuracy_Value: 0.000 ft
                                Vertical_Positional_Accuracy_Explanation: NAVD 88 level
run, 0.000 ft closure in 86.0 ft, max. allowed 0.004 ft (MTS)
        Lineage:
                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:
                                The horizontal work was performed using a Trimble GPS
                                Pathfinder Pro XR reciever using U.S. Coast Guard
                                beacon at Cape Canaveral. The level line was performed
                                using a Leica NA3003 electronic digital level.
                        Process_Date: 20050625
                        Process_Contact:
                                Contact_Information:
                                        Contact_Person_Primary:
                                        Contact_Organization_Primary:
                                        Contact_Address:
Spatial_Data_Organization_Information:
        Spatial_Reference_Information:
                Horizontal_Coordinate_System_Definition:
                        Geographic:
                        Planar:
```

Horizontal

Level Line

```
                                        SNIVLY.gen
                                Map_Projection:
                                        Albers_Conical_Equal_Area:
                                        Azimuthal_Equidistant:
                                        Equidistant_Conic:
                                        Equirectangular:
                                        General_Vertical_Near-sided_Perspective:
                                        Gnomonic:
                                        Lambert_Azimuthal_Equal_Area:
                                        Lambert_Conformal_Conic:
                                        Mercator:
                                        Modified_Stereographic_for_Alaska:
                                        Miller_Cylindrical:
                                        Oblique_Mercator:
                                                Oblique_Line_Point:
                                        Orthographic:
                                        Polar_Stereographic:
                                        Polyconic:
                                        Robinson:
                                        Sinusoidal:
                                        van_der_Grinten:
                                        Space_Oblique_Mercator_(Landsat):
                                        Stereographic:
                                        Transverse_Mercator:
                                        van_der_Grinten:
                                Grid_Coordinate_System:
                                        Universal_Transverse_Mercator:
                                                Transverse_Mercator:
                                        Universal_Polar_Stereographic:
                                                Polar_Stereographic:
                                        State_Plane_Coordinate_System:
                                                Lambert_Conformal_Conic:
                                                Transverse_Mercator:
                                                Oblique_Mercator:
                                                        Oblique_Line_Point:
                                                Polyconic:
                                        ARC_Coordinate_System:
                                                Equirectangular:
                                                Azimuthal_Equidistant:
                                Local_Planar:
                                Planar_Coordinate_Information:
                                        Coordinate_Representation:
                                        Distance_and_Bearing_Representation:
                        Local:
                        Geodetic_Model:
                                Horizontal_Datum_Name: North American Datum of 1983
                                Ellipsoid_Name: Geodetic Reference System 80
                Vertical_Coordinate_System_Definition:
                        Altitude_System_Definition:
                        Depth_System_Definition:
Entity_and_Attribute_Information:
        Detailed_Description:
                Entity_Type:
                Attribute:
                        Attribute_Domain_Values:
                        Attribute_Value_Accuracy_Information:
        Overview_Description:
Distribution_Information:
        Distributor:
                Contact_Information:
                        Contact_Person_Primary:
                        Contact_Organization_Primary:
                        Contact_Address:
        Standard_Order_Process:
                Digital_Form:
                        Digital_Transfer_Information:
                        Digital_Transfer_Option:
                                Online_Option:
                                        Computer_Contact_Information:
                                                Network_Address:
                                                Dialup_Instructions:
```

```
                                        SNIVLY.gen
                                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: 20050518
        Metadata_Contact:
                Contact_Information:
                        Contact_Person_Primary:
                                Contact_Person: Darren Townsend
                                Contact_Organization: Cooner & Associates, Inc.
                        Contact_Organization_Primary:
                        Contact_Position: Project Surveyor
                        Contact_Address:
                                Address_Type: mailing and physical address
                                Address: 5670 Zip Drive
                                City: Fort Myers
                                State_or_Province: Florida
                                Postal_Code: 33905
                                Country: USA
                        Contact_Voice_Telephone: (239) 277-0722
                        Contact_Facsimile_Telephone: (239) 277-7179
                        Contact_Electronic_Mail_Address: darrent@cooner.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: 19980601
        Metadata_Security_Information:
```

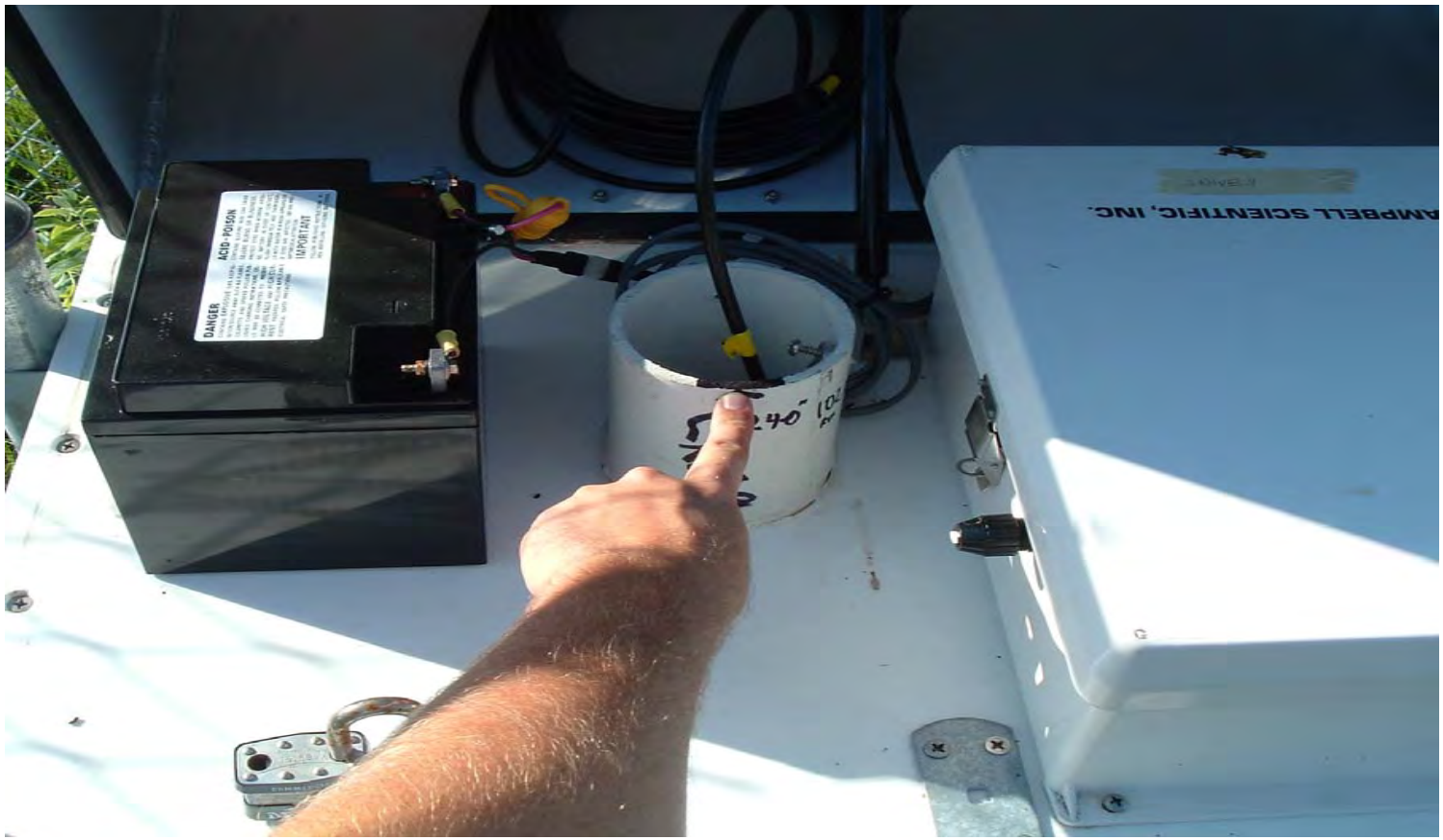
SNIVELY'S RANCH

- COONER & ASSOCIATES, INC.
  - Date of photo: March 29, 2005
- View: Looking North at BM SNRH5

SNIVELY'S RANCH

- COONER & ASSOCIATES, INC.
  - Date of photo: March 29, 2005
- View: Looking at top view of BM SNRH5

SNIVELY'S RANCH



- COONER & ASSOCIATES, INC.
  - Date of photo: March 29, 2005
- View: Looking at Elevation on well

SNIVELY'S RANCH

- COONER & ASSOCIATES, INC.
  - Date of photo: March 29, 2005
    - View: Looking North at well

020801.03 SFWMD 3/29/05 FB86 PG55

Snively's Ranch (Well Elevation) Etgeton
Collins

Card 1, Run b

+	HI	−	EL	Adj EL	PT*	Description
4.745			65.43' NAVD 88		123	Set 2" Aluminum Disk In ~12" Poured Concrete Monument "SO FLA WATER MANAGMENT DIST BM SNRH5"
1.116	70.175'					
~~1.155~~		0.930	69.245'	69.25'	201	Elevated Well At Mark on Top Of Pipe
	70.401					
		4.971	65.430'	65.43'	123	Check In To Start Point
			(65.43' POSTED)			

LINE LENGTH = 86.0'

ALLOWABLE MISCLOSURE = $0.03\sqrt{\frac{86'}{5280}}$

= +/− 0.004'

ACTUAL MISCLOSURE = 0.000'

020801.03 SFWMD

Snively's Ranch

A- Well

N: + 1322492.373'

E: - 521369.501'

~~Et.~~

B- Set 2" Aluminum Disk In ~12" Poured Concrete Monument "SO. FLA. WATER MANAGMENT DIST. BM SNRH5"

N: 1322488.460'

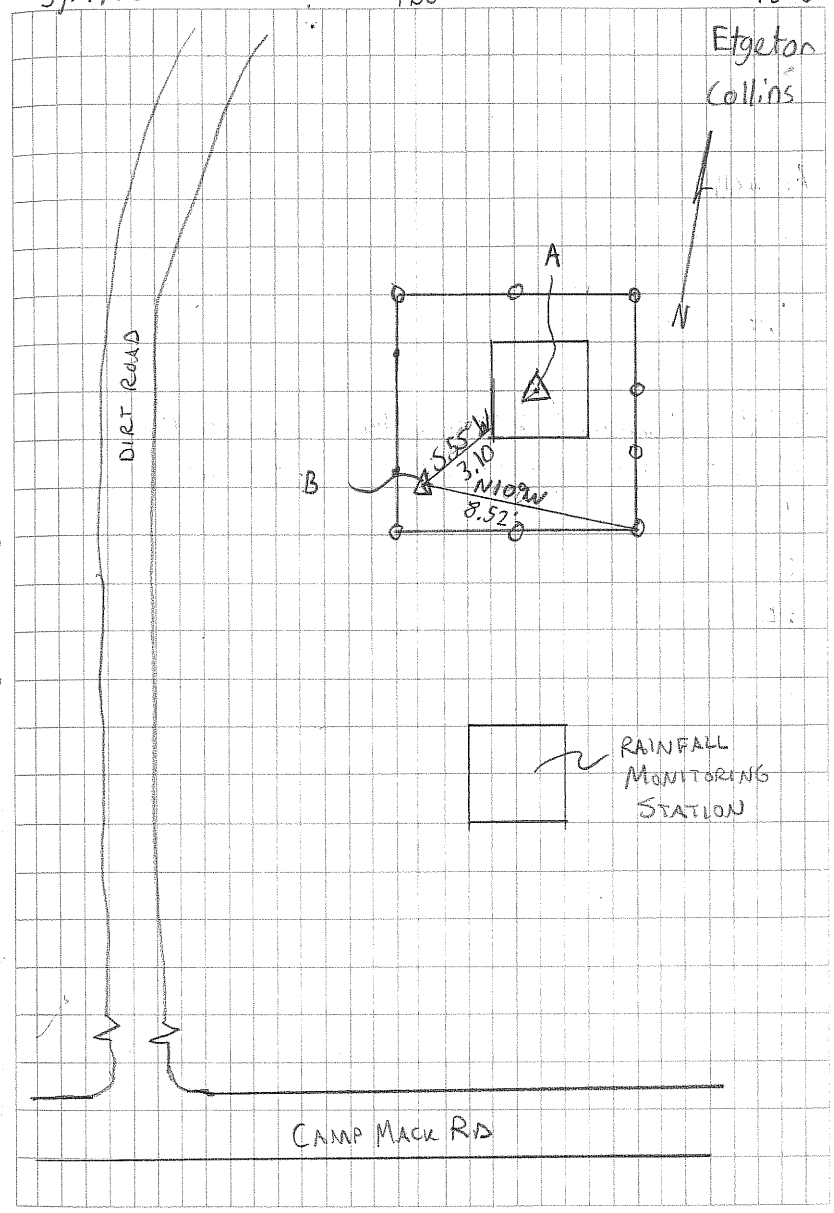
E: 521366.648'

~~Et.~~

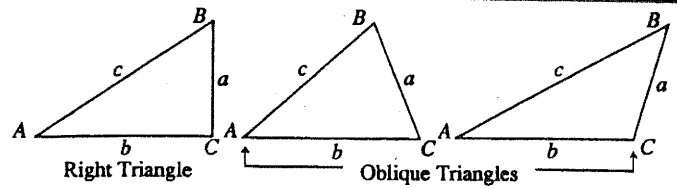
FL STATE PLANE, EAST ZONE

3/29/05 FB86 PG56

Etgeton Collins



TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

Given	Required	
a, b	A, B, c	$\tan A = \frac{a}{b} = \cot B,\ c = \sqrt{a^2 + b^2} = a\sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B,\ b = \sqrt{(c + a)(c - a)} = c\sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90° - A,\ b = a \cot A,\ c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90° - A,\ a = b \tan A,\ c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90° - A,\ a = c \sin A,\ b = c \cos A,$

Solution of Oblique Triangles

Given	Required	
A, B, a	b, c, C	$b = \frac{a \sin B}{\sin A},\ C = 180° - (A + B),\ c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a},\ C = 180° - (A + B),\ c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180° - C,\ \tan \frac{1}{2}(A - B) = \frac{(a-b) \tan \frac{1}{2}(A+B)}{a+b},$ $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a+b+c}{2},\ \sin \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{b\,c}},$ $\sin \frac{1}{2}B = \sqrt{\frac{(s-a)(s-c)}{a\,c}},\ C = 180° - (A + B)$
a, b, c	Area	$s = \frac{a+b+c}{2},\ \text{area} = \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	$\text{area} = \frac{b\,c \sin A}{2}$
A, B, C, a	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

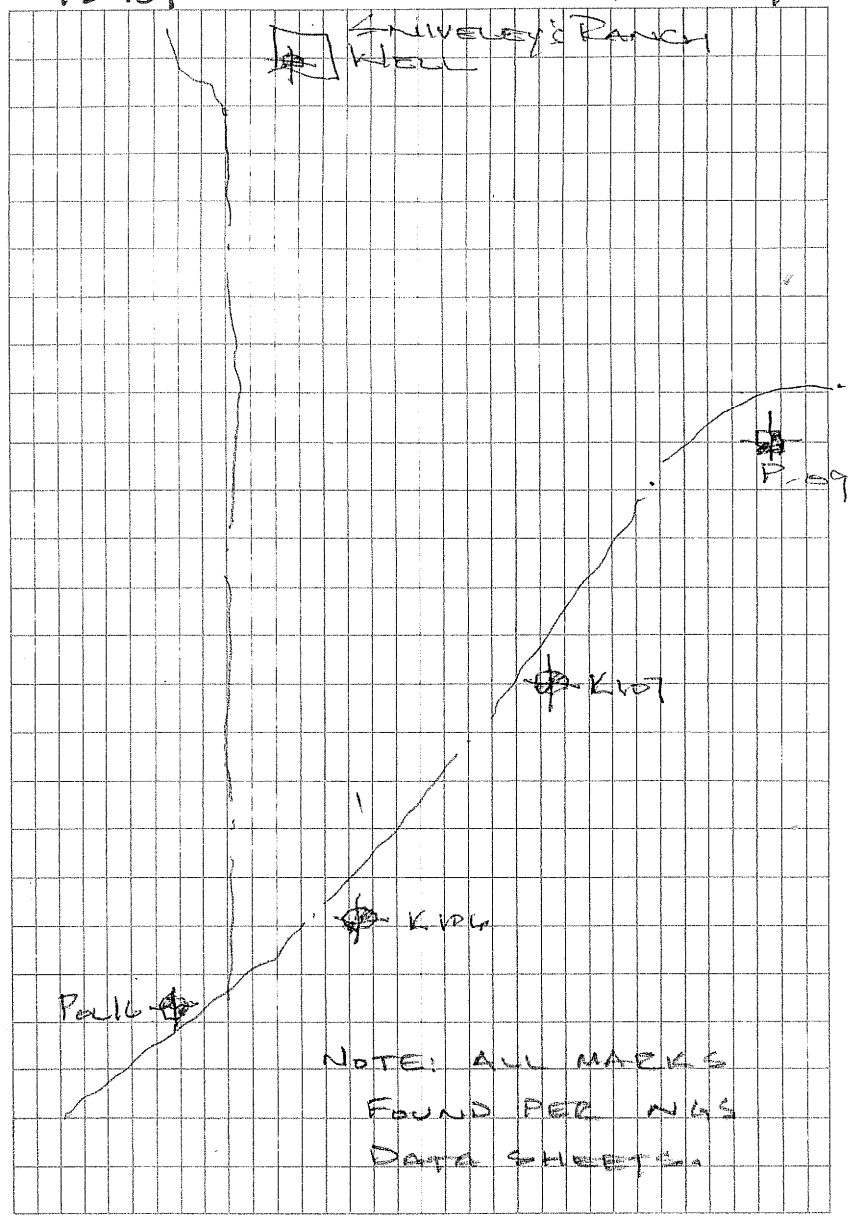
FB 139

SHIVELY'S RANCH
WELL

LEVEL RUN
LEICA NA2002
DIGITAL LEVEL
BAR CODE ROD

SNIVELY'S RANCH

FB 139



Snively's Ranch

BS	HI	FS	EL.	Note
5.052	69.062		64.01	~~BM~~ 100
5.286	69.615	4.733	64.329	TP-1
5.221	69.850	4.985	64.630	TP-2
4.802	70.319	4.333	65.517	TP-3
4.213	69.720	4.812	65.507	TP-4
4.365	69.210	4.876	64.845	TP-5
6.694	69.898	6.007	63.203	~~6 BM~~
4.530	69.585	4.842	65.055	TP-7
4.941	69.402	5.125	64.460	TP-8
4.377	68.718	5.060	64.342	TP-9
6.736	68.238	7.216	61.502	10 BM
4.026	67.957	4.308	63.931	TP-11
5.134	68.495	4.596	63.361	~~12 BM~~ 112
4.975	69.403	4.067	64.428	TP-13
5.722	71.291	3.834	65.569	T-14
5.459	72.271	4.479	66.812	T-15
4.958	72.048	5.181	67.090	T-16
4.955	72.405	4.598	67.450	T-17
4.224	72.387	4.242	68.163	T-18
4.594	72.086	4.895	67.492	T-19
			17,912	Ft.

A. Johnson FB. 139 2

M. Amore

80° & Sunny Hazy

EBM CM w/ Aluminum Disk Set in BM P-69 (NA

K107 63.17 (proj.)

K106 61.46 (proj.)

Polio 63.32 (proj.) (63.36' adjusted)

4-Lo-5 SNIVELY'S RANCH

FB 139

A. JOHNSON
M. AMODEE

BS	HI.	FS	EL.	NOTES
	72.086 (CONT.)			
4.321	71.836	4.571	67.515	T-20
4.899	70.990	~~5.744~~		T-21
4.029	70.143	4.877	66.114	22
4.395	69.832	4.706	65.437	~~23 BM~~ 123
5.520	71.514	3.838	65.994	24
3.935	71.301	4.149	67.366	25
5.023	72.158	4.165	67.136	26
4.928	72.060	5.027	67.132	27
4.731	72.756	4.034	68.025	28
4.758	72.170	5.344	67.412	~~29~~ 129
5.307	72.658	4.820	67.351	30
4.431	71.986	5.103	67.555	31
4.021	70.736	5.230	66.716	32
4.590	68.242	7.124	63.652	~~33~~ 133
4.673	68.155	4.760	64.482	34
		6.689	61.466	~~35~~ 135

(61.46' POSTED)

1 ALUM DISK IN CONC (65.43' ADJUSTED)
BM "BM SNRLS"
SET IN MD

KR 1833 BRASS DISK AGENCY JAX 2004 (67.41' ADJUSTED)
ARMY CORPS OF E.

KR 1832 "JAX" A. COE (63.65' ADJUSTED)

BM K-~~107~~ 106 (61.46' ADJUSTED)

LINE LENGTH = 17912.2'

ALLOWABLE MISCLOSURE = $0.03\sqrt{17912.2/5280}$

= +/- 0.055

ACTUAL MISCLOSURE = 0.006'

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY Polk	**PROJECT** Snively's Ranch	**DESIGNATION** SNRH 5
SECTION 9	**TOWNSHIP** 29S	**RANGE** 29E

GEOGRAPHIC INDEX OF QUAD

Established by X **Recovered by** Cooner & Associates, Inc. (Field work by EF Gaines)	**NAME OF QUADRANGLE** Hesperides
SURVEYOR A. Johnson **DATE** 04 / 06 / 2005	**FIELD BOOK** 139 **PAGE** 1-3

HORIZONTAL DATUM: **1927** ~~**1983**~~ **Other**_____ (circle one) ZONE **E** or **W**

VERTICAL DATUM: MSL **1929** ~~**1988**~~ **Other** _____ (circle one)

CONTROL ACCURACY: HORIZONTAL 1 2 3 Sub-meter (circle one) **VERTICAL 1 2 3**

STATE PLANE COORDINATES	**X** 521366.65'	**Y** 1322488.46'	**EL.** 65.43'

LATITUDE 27° 58' 16.0" N LONGITUDE 081° 25' 03.4" W

DESCRIPTION SFWMD ALUM. DISK IN CONCRETE STAMPED "BMSNRH5"

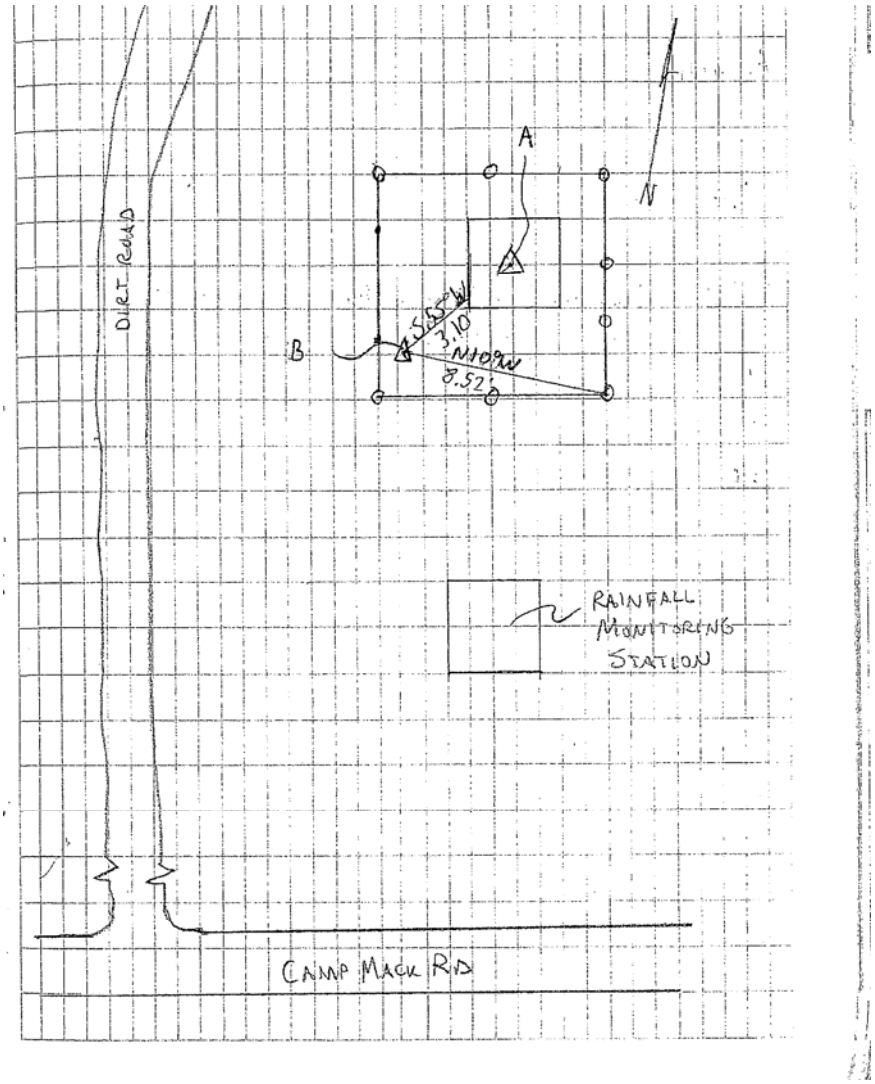
To Reach:

From the intersection of State Road 60 & State Road 630, go NW on State Road 60.
Take right on Boy Scout Camp Road. Take right on
Camp Mack Road to a gravel road on the left, just past the "R&R Turf Farm" sign. Go ~1.2 miles to mark on the right.

Notable Land marks:

Mark is inside fence at well location on right side, ~1.2 miles from Camp Mack Road.

SKETCH


A
N
DIRT ROAD
B
S55°W
3.10
N10°W
3.52
RAINFALL
MONITORING
STATION
CAMP MACK RD

The NGS Data Sheet

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

```
DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.35
1        National Geodetic Survey,   Retrieval Date = APRIL 27, 2006
 AF7021 ***********************************************************************
 AF7021  DESIGNATION -  PO 9
 AF7021  PID         -  AF7021
 AF7021  STATE/COUNTY-  FL/POLK
 AF7021  USGS QUAD   -  HESPERIDES (1972)
 AF7021
 AF7021                         *CURRENT SURVEY CONTROL
 AF7021  ______________________________________________________________________
 AF7021* NAD 83(1999)-  27 58 07.48332(N)    081 24 01.22426(W)     ADJUSTED
 AF7021* NAVD 88     -         19.511  (meters)      64.01   (feet)  ADJUSTED
 AF7021  ______________________________________________________________________
 AF7021  X           -     842,948.242 (meters)                      COMP
 AF7021  Y           -  -5,573,959.261 (meters)                      COMP
 AF7021  Z           -   2,973,443.038 (meters)                      COMP
 AF7021  LAPLACE CORR-           -2.16  (seconds)                     DEFLEC99
 AF7021  ELLIP HEIGHT-           -7.69  (meters)          (01/28/04) GPS OBS
 AF7021  GEOID HEIGHT-          -27.18  (meters)                      GEOID03
 AF7021  DYNAMIC HT  -           19.481 (meters)      63.91  (feet)  COMP
 AF7021  MODELED GRAV-      979,148.7   (mgal)                        NAVD 88
 AF7021
 AF7021  HORZ ORDER  -  FIRST
 AF7021  VERT ORDER  -  SECOND    CLASS I
 AF7021  ELLP ORDER  -  THIRD     CLASS I
 AF7021
 AF7021.The horizontal coordinates were established by GPS observations
 AF7021.and adjusted by the FL DEPT OF ENV PRO in January 2004..
 AF7021
 AF7021.The orthometric height was determined by differential leveling
 AF7021.and adjusted by the National Geodetic Survey in June 1991..
 AF7021
 AF7021.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AF7021
 AF7021.The Laplace correction was computed from DEFLEC99 derived deflections.
 AF7021
 AF7021.The ellipsoidal height was determined by GPS observations
 AF7021.and is referenced to NAD 83.
 AF7021
 AF7021.The geoid height was determined by GEOID03.
 AF7021
 AF7021.The dynamic height is computed by dividing the NAVD 88
 AF7021.geopotential number by the normal gravity value computed on the
 AF7021.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AF7021.degrees latitude (g = 980.6199 gals.).
 AF7021
 AF7021.The modeled gravity was interpolated from observed gravity values.
 AF7021
 AF7021;                    North         East      Units Scale Factor Converg.
 AF7021;SPC FL W     -   402,890.374   258,997.817   MT  0.99998412   +0 16 52.5
 AF7021;SPC FL W     - 1,321,816.17    849,728.67    sFT  0.99998412   +0 16 52.5
 AF7021;UTM  17      - 3,093,804.657   460,626.022   MT  0.99961913   -0 11 15.9
 AF7021
 AF7021!             -  Elev Factor  x  Scale Factor =   Combined Factor
 AF7021!SPC FL W     -   1.00000121  x   0.99998412  =   0.99998533
 AF7021!UTM  17      -   1.00000121  x   0.99961913  =   0.99962034
 AF7021
 AF7021                          SUPERSEDED SURVEY CONTROL
 AF7021
 AF7021  NAVD 88 (01/28/04)   19.51   (m)           64.0    (f) LEVELING    3
 AF7021  NGVD 29 (09/01/92)   19.879  (m)           65.22   (f) ADJUSTED    2 2
 AF7021
 AF7021.Superseded values are not recommended for survey control.
 AF7021.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AF7021.See file dsdata.txt to determine how the superseded data were derived.
 AF7021
 AF7021_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML6062693805(NAD 83)
 AF7021_MARKER: DB = BENCH MARK DISK
 AF7021_SETTING: 9 = SET IN PREFABRICATED CONCRETE POST IMBEDDED IN GROUND
```

AF7021_SP_SET: SET IN TOP OF CONCRETE MONUMENT
AF7021_STAMPING: S.F.W.M PO BM 9
AF7021_MARK LOGO: SFLWMD
AF7021_PROJECTION: PROJECTING 13 CENTIMETERS
AF7021_MAGNETIC: N = NO MAGNETIC MATERIAL
AF7021_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
AF7021_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AF7021+SATELLITE: SATELLITE OBSERVATIONS - April 18, 2005
AF7021

AF7021	HISTORY	- Date	Condition	Report By
AF7021	HISTORY	- UNK	MONUMENTED	SFLWMD
AF7021	HISTORY	- 1983	GOOD	FLDNR
AF7021	HISTORY	- 19970203	MARK NOT FOUND	USPSQD
AF7021	HISTORY	- 20010118	GOOD	FLDEP
AF7021	HISTORY	- 20020304	GOOD	PICKET
AF7021	HISTORY	- 20030403	GOOD	FLDEP
AF7021	HISTORY	- 20030922	GOOD	FL-105
AF7021	HISTORY	- 20050418	GOOD	INDIV

AF7021
AF7021 STATION DESCRIPTION
AF7021
AF7021'DESCRIBED BY FL DEPT OF NAT RES 1983
AF7021'15.95 MI ENE FROM LAKE WALES.
AF7021'BEGIN IN LAKE WALES AT THE STATE HIGHWAY 60 BRIDGE OVER THE SCL
AF7021'RAILROAD, GO 8.25 MILES EASTERLY ON HIGHWAY 60 TO THE INTERSECTION
AF7021'OF BOY SCOUT ROAD, GO 3.7 MILES NORTH ON BOY SCOUT ROAD TO CAMP MACK
AF7021'ROAD, GO 4.0 MILES EASTERLY ON CAMP MACK ROAD TO THE MARK.
AF7021'THE MARK BEARS 41.7 FEET SOUTHWEST OF THE CENTERLINE OF CAMP MACK
AF7021'ROAD, 1.3 FEET NORTH OF A FENCE LINE, 4.6 FEET SOUTH OF POWER POLE
AF7021'NO. 6-10631, AND 32 FEET NORTHWEST OF A GATE POST.
AF7021
AF7021 STATION RECOVERY (1997)
AF7021
AF7021'RECOVERY NOTE BY US POWER SQUADRON 1997
AF7021'MARK NOT FOUND.
AF7021
AF7021 STATION RECOVERY (2001)
AF7021
AF7021'RECOVERY NOTE BY FL DEPT OF ENV PRO 2001 (JLM)
AF7021'THE MARK IS ABOUT 15.5 MI (24.9 KM) EAST-NORTHWEST OF LAKE WALES, IN
AF7021'SECTION 15, TOWNSHIP 29 SOUTH, RANGE 29 EAST. TO REACH THE MARK FROM
AF7021'THE INTERSECTION OF STATE ROAD 27 AND STATE ROAD 60 IN LAKE WALES, GO
AF7021'EAST-SOUTHEAST ON STATE ROAD 60 FOR 7.3 MI (11.7 KM) TO THE JUNCTION
AF7021'OF MAMMOTH GROVE ROAD ON THE LEFT, TURN LEFT ON MAMMOTH GROVE ROAD AND
AF7021'GO FOR 2.05 MI (3.30 KM) TO THE JUNCTION OF CAMP MACK ROAD ON THE
AF7021'RIGHT, TURN RIGHT ON CAMP MACK ROAD FOR AND GO NORTH 0.25 MI (0.40 KM)
AF7021'TO A CURVE EAST, CONTINUE EAST ON CAMP MACK ROAD FOR 2.3 MI (3.7 KM)
AF7021'TO THE JUNCTION OF BARNEY KEEN ROAD (BOY SCOUT ROAD) ON THE RIGHT,
AF7021'CONTINUE NORTHEASTERLY ON CAMP MACK ROAD FOR 3.7 MI (6.0 KM) TO THE
AF7021'MARK ON THE RIGHT, SET IN THE TOP OF A 4-INCH SQUARE CONCRETE MONUMENT
AF7021'PROJECTING 0.4 FT (12.2 CM) ABOVE THE LEVEL OF THE GROUND AND ABOVE
AF7021'THE LEVEL OF CAMP MACK ROAD. LOCATED 42.1 FT (12.8 M) SOUTHEAST OF THE
AF7021'APPROXIMATE CENTERLINE OF CAMP MACK ROAD, 3.5 FT (1.1 M) SOUTHEAST OF
AF7021'POWER POLE NUMBER FPC B11515, 1.9 FT (0.6 M) NORTHWEST OF A BARBWIRE
AF7021'FENCE AND 1.5 FT (0.5 M) NORTHWEST OF A CARSONITE WITNESS POST.
AF7021
AF7021 STATION RECOVERY (2002)
AF7021
AF7021'RECOVERY NOTE BY PICKETT AND ASSOCIATES 2002 (HS)
AF7021'RECOVERED IN GOOD CONDITION.
AF7021
AF7021 STATION RECOVERY (2003)
AF7021
AF7021'RECOVERY NOTE BY FL DEPT OF ENV PRO 2003 (BPJ)
AF7021'RECOVERED AS DESCRIBED.
AF7021'
AF7021'
AF7021'
AF7021'
AF7021
AF7021 STATION RECOVERY (2003)
AF7021
AF7021'RECOVERY NOTE BY POLK COUNTY FLORIDA 2003 (RWY)
AF7021'RECOVERED AS DESCRIBED. RECOVERY NOTE BY POLK COUNTY PROPERTY
AF7021'APPRAISER GIS DEPARTMENT.
AF7021
AF7021 STATION RECOVERY (2005)
AF7021
AF7021'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2005 (ADJ)
AF7021'RECOVERED IN GOOD CONDITION.

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*** retrieval complete.
Elapsed Time = 00:00:00
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The NGS Data Sheet

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

```
DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.35
1        National Geodetic Survey,   Retrieval Date = APRIL 27, 2006
 AF7634 ***********************************************************************
 AF7634  DESIGNATION -  K 106
 AF7634  PID         -  AF7634
 AF7634  STATE/COUNTY-  FL/POLK
 AF7634  USGS QUAD   -  HESPERIDES (1972)
 AF7634
 AF7634                         *CURRENT SURVEY CONTROL
 AF7634  ______________________________________________________________________
 AF7634* NAD 83(1999)-  27 57 33.88807(N)    081 24 48.85158(W)     ADJUSTED
 AF7634* NAVD 88     -        18.734  (meters)      61.46   (feet)  ADJUSTED
 AF7634  ______________________________________________________________________
 AF7634  X           -     841,733.484 (meters)                     COMP
 AF7634  Y           -  -5,574,632.669 (meters)                     COMP
 AF7634  Z           -   2,972,529.309 (meters)                     COMP
 AF7634  LAPLACE CORR-          -2.30  (seconds)                    DEFLEC99
 AF7634  ELLIP HEIGHT-          -8.36  (meters)          (07/06/01) GPS OBS
 AF7634  GEOID HEIGHT-         -27.13  (meters)                     GEOID03
 AF7634  DYNAMIC HT  -          18.706 (meters)      61.37  (feet)  COMP
 AF7634  MODELED GRAV-     979,148.6   (mgal)                       NAVD 88
 AF7634
 AF7634  HORZ ORDER  -  SECOND
 AF7634  VERT ORDER  -  SECOND    CLASS I
 AF7634  ELLP ORDER  -  FOURTH    CLASS II
 AF7634
 AF7634.The horizontal coordinates were established by GPS observations
 AF7634.and adjusted by the National Geodetic Survey in July 2001..
 AF7634
 AF7634.The orthometric height was determined by differential leveling
 AF7634.and adjusted by the National Geodetic Survey in April 2004..
 AF7634
 AF7634.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AF7634
 AF7634.The Laplace correction was computed from DEFLEC99 derived deflections.
 AF7634
 AF7634.The ellipsoidal height was determined by GPS observations
 AF7634.and is referenced to NAD 83.
 AF7634
 AF7634.The geoid height was determined by GEOID03.
 AF7634
 AF7634.The dynamic height is computed by dividing the NAVD 88
 AF7634.geopotential number by the normal gravity value computed on the
 AF7634.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AF7634.degrees latitude (g = 980.6199 gals.).
 AF7634
 AF7634.The modeled gravity was interpolated from observed gravity values.
 AF7634
 AF7634;                    North         East      Units Scale Factor Converg.
 AF7634;SPC FL W     -   401,849.922   257,701.134   MT  0.99998226   +0 16 29.8
 AF7634;SPC FL W     - 1,318,402.62    845,474.47    sFT  0.99998226   +0 16 29.8
 AF7634;SPC FL E     -   401,780.331   159,307.457   MT  0.99996161   -0 11 38.1
 AF7634;SPC FL E     - 1,318,174.30    522,661.22    sFT  0.99996161   -0 11 38.1
 AF7634;UTM  17      - 3,092,775.226   459,321.341   MT  0.99962042   -0 11 38.1
 AF7634
 AF7634!             -  Elev Factor  x  Scale Factor =   Combined Factor
 AF7634!SPC FL W     -   1.00000131  x   0.99998226  =   0.99998357
 AF7634!SPC FL E     -   1.00000131  x   0.99996161  =   0.99996292
 AF7634!UTM  17      -   1.00000131  x   0.99962042  =   0.99962173
 AF7634
 AF7634                          SUPERSEDED SURVEY CONTROL
 AF7634
 AF7634  NAD 83(1990)-  27 57 33.88820(N)    081 24 48.85198(W) AD(       ) 2
 AF7634  ELLIP H (12/04/92)   -8.34   (m)                        GP(       ) 3 2
 AF7634  NGVD 29 (12/04/92)   19.1    (m)           63.     (f) GPS OBS
 AF7634
 AF7634.Superseded values are not recommended for survey control.
 AF7634.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AF7634.See file dsdata.txt to determine how the superseded data were derived.
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AF7634
AF7634_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML5932192775(NAD 83)
AF7634_MARKER: F = FLANGE-ENCASED ROD
AF7634_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AF7634_SP_SET: STAINLESS STEEL ROD
AF7634_STAMPING: K 106 1991
AF7634_MARK LOGO: NGS
AF7634_PROJECTION: RECESSED 36 CENTIMETERS
AF7634_MAGNETIC: N = NO MAGNETIC MATERIAL
AF7634_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AF7634_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AF7634+SATELLITE: SATELLITE OBSERVATIONS - April 18, 2005
AF7634_ROD/PIPE-DEPTH: 11 meters
AF7634
AF7634 HISTORY - Date Condition Report By
AF7634 HISTORY - 1991 MONUMENTED KEISCH
AF7634 HISTORY - 19970210 GOOD USPSQD
AF7634 HISTORY - 20010118 GOOD FLDEP
AF7634 HISTORY - 20020315 GOOD PICKET
AF7634 HISTORY - 20030922 GOOD FL-105
AF7634 HISTORY - 20050418 GOOD INDIV
AF7634
AF7634 STATION DESCRIPTION
AF7634
AF7634'DESCRIBED BY KEITH AND SCHNARS - LAKELAND 1991
AF7634'THE STATION IS LOCATED ABOUT 12.5 MI (20.1 KM) NORTHEAST OF LAKE WALES
AF7634'IN THE EAST RIGHT-OF-WAY OF CAMP MACK ROAD IN SECTION 15, TOWNSHIP 29
AF7634'SOUTH, RANGE 29 EAST, POLK COUNTY, FLORIDA.
AF7634'TO REACH THE STATION FROM THE INTERSECTION OF S.R. 60 AND U.S. 27 IN
AF7634'LAKE WALES, GO EAST ON S.R. 60 FOR 9.5 MI (15.3 KM) TO THE
AF7634'INTERSECTION OF S.R. 60 AND BOY SCOUT ROAD. TURN LEFT AND GO NORTH ON
AF7634'BOY SCOUT ROAD 3.5 MI (5.6 KM) TO THE INTERSECTION OF BOY SCOUT ROAD
AF7634'AND CAMP MACK ROAD. TURN RIGHT AND GO NORTHEAST ON CAMP MACK ROAD 3.0
AF7634'MI (4.8 KM) TO THE STATION IN THE EAST RIGHT-OF-WAY. THE STATION LIES
AF7634'9.8 FT (3.0 M) SOUTHEAST OF THE SOUTHEAST EDGE OF PAVEMENT, 26.2 FT
AF7634'(8.0 M) WEST OF THE BARBWIRE FENCE, AND 220 FT (67.1 M) EAST
AF7634'NORTHEAST OF A POWER POLE (NUMBER 6-12852). ACCESS TO DATUM
AF7634'POINT--THE STATION IS RECESSED 1.2 FT (0.4 M) BELOW GROUND INSIDE A
AF7634'NGS LOGO CAP WHICH IS MOUNTED ON A 5 1/4 INCH DIAMETER PVC PIPE SET
AF7634'IN A CONCRETE COLLAR.
AF7634'REFERENCES--
AF7634'KEITH AND SCHNARS NAIL AND DISC, SET IN FENCE POST, SOUTH 1 DEGREE
AF7634'EAST AT 33.30 FT (10.15 M).
AF7634'KEITH AND SCHNARS NAIL AND DISC, SET AT EDGE OF PAVEMENT, SOUTH 81
AF7634'DEGREES WEST AT 21.36 FT (6.51 M).
AF7634'KEITH AND SCHNARS NAIL AND DISC, SET AT EDGE OF PAVEMENT, NORTH 20
AF7634'DEGREES EAST AT 20.20 FT (6.16 M).
AF7634'KEITH AND SCHNARS NAIL AND DISC, SET IN FENCE POST, SOUTH 88 DEGREES
AF7634'EAST AT 41.18 FT (12.55 M).
AF7634'SET CARSONITE WITNESS POST, SOUTH 37 DEGREES EAST AT 26.24 FT
AF7634'(8.00 M).
AF7634
AF7634 STATION RECOVERY (1997)
AF7634
AF7634'RECOVERY NOTE BY US POWER SQUADRON 1997
AF7634'RECOVERED IN GOOD CONDITION.
AF7634
AF7634 STATION RECOVERY (2001)
AF7634
AF7634'RECOVERY NOTE BY FL DEPT OF ENV PRO 2001 (JLM)
AF7634'THE MARK IS ABOUT 14.7 MI (23.7 KM) EAST-NORTHWEST OF LAKE WALES, IN
AF7634'SECTION 15, TOWNSHIP 29 SOUTH, RANGE 29 EAST. TO REACH THE MARK FROM
AF7634'THE INTERSECTION OF STATE ROAD 27 AND STATE ROAD 60 IN LAKE WALES, GO
AF7634'EAST-SOUTHEAST ON STATE ROAD 60 FOR 7.3 MI (11.7 KM) TO THE JUNCTION
AF7634'OF MAMMOTH GROVE ROAD ON THE LEFT, TURN LEFT ON MAMMOTH GROVE ROAD AND
AF7634'GO NORTH FOR 2.05 MI (3.30 KM) TO THE JUNCTION OF CAMP MACK ROAD ON
AF7634'THE RIGHT, TURN RIGHT ON CAMP MACK ROAD AND GO NORTH FOR 0.25 MI (0.40
AF7634'KM) TO A CURVE EAST, CONTINUE EAST ON CAMP MACK ROAD FOR 2.3 MI (3.7
AF7634'KM) TO THE JUNCTION OF BARNEY KEEN ROAD (BOY SCOUT ROAD) ON THE RIGHT,
AF7634'CONTINUE NORTHEASTERLY ON CAMP MACK ROAD FOR 3.0 MI (4.8 KM) TO THE
AF7634'MARK ON THE RIGHT, A STAINLESS STEEL ROD DRIVEN INTO THE GROUND WITH A
AF7634'NGS LOGO CAP RECESSED 1.2 FT (0.4 M) BELOW THE LEVEL OF THE GROUND AND
AF7634'BELOW THE LEVEL OF CAMP MACK ROAD, THE DATUM POINT IS RECESSED 0.3 FT
AF7634'(9.1 CM) BELOW THE LEVEL OF THE NGS LOGO CAP. LOCATED 26.2 FT (8.0 M)
AF7634'NORTHWEST OF A BARBWIRE FENCE, 25.8 FT (7.9 M) NORTHWEST OF A
AF7634'CARSONITE WITNESS POST, 22.6 FT (6.9 M) NORTHWEST OF POWER POLE NUMBER
AF7634'FPC B11498, 21.0 FT (6.4 M) SOUTHEAST OF THE APPROXIMATE CENTERLINE OF
AF7634'CAMP MACK ROAD AND 9.8 FT (3.0 M) SOUTHEAST OF THE SOUTHEAST EDGE OF
AF7634'THE PAVEMENT AND 1.0 FT (0.3 M) NORTHWEST OF A CARSONITE WITNESS POST.
AF7634'NOTE ACCESS TO THE DATUM POINT IS HAD THROUGH A 5-INCH NGS LOGO CAP.
AF7634

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AF7634                          STATION RECOVERY (2002)
AF7634
AF7634'RECOVERY NOTE BY PICKETT AND ASSOCIATES 2002 (HS)
AF7634'RECOVERED IN GOOD CONDITION.
AF7634
AF7634                          STATION RECOVERY (2003)
AF7634
AF7634'RECOVERY NOTE BY POLK COUNTY FLORIDA 2003 (RWY)
AF7634'RECOVERED AS DESCRIBED. RECOVERY NOTE BY POLK COUNTY PROPERTY
AF7634'APPRAISER GIS DEPARTMENT.
AF7634
AF7634                          STATION RECOVERY (2005)
AF7634
AF7634'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2005 (ADJ)
AF7634'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:00
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The NGS Data Sheet

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

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DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.35
1        National Geodetic Survey,   Retrieval Date = APRIL 27, 2006
 AF7636 ***********************************************************************
 AF7636  DESIGNATION -  K 107
 AF7636  PID         -  AF7636
 AF7636  STATE/COUNTY-  FL/POLK
 AF7636  USGS QUAD   -  HESPERIDES (1972)
 AF7636
 AF7636                         *CURRENT SURVEY CONTROL
 AF7636  ______________________________________________________________________
 AF7636* NAD 83(1999)-  27 57 47.79066(N)    081 24 29.49871(W)     ADJUSTED
 AF7636* NAVD 88     -        19.253  (meters)      63.17   (feet)  ADJUSTED
 AF7636  ______________________________________________________________________
 AF7636  X           -     842,226.611 (meters)                     COMP
 AF7636  Y           -  -5,574,355.695 (meters)                     COMP
 AF7636  Z           -   2,972,907.548 (meters)                     COMP
 AF7636  LAPLACE CORR-          -2.24  (seconds)                    DEFLEC99
 AF7636  ELLIP HEIGHT-          -7.86  (meters)          (07/06/01) GPS OBS
 AF7636  GEOID HEIGHT-         -27.15  (meters)                     GEOID03
 AF7636  DYNAMIC HT  -          19.224 (meters)      63.07  (feet)  COMP
 AF7636  MODELED GRAV-     979,148.6   (mgal)                       NAVD 88
 AF7636
 AF7636  HORZ ORDER  -  SECOND
 AF7636  VERT ORDER  -  SECOND    CLASS I
 AF7636  ELLP ORDER  -  FOURTH    CLASS II
 AF7636
 AF7636.The horizontal coordinates were established by GPS observations
 AF7636.and adjusted by the National Geodetic Survey in July 2001..
 AF7636
 AF7636.The orthometric height was determined by differential leveling
 AF7636.and adjusted by the National Geodetic Survey in April 2004..
 AF7636
 AF7636.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AF7636
 AF7636.The Laplace correction was computed from DEFLEC99 derived deflections.
 AF7636
 AF7636.The ellipsoidal height was determined by GPS observations
 AF7636.and is referenced to NAD 83.
 AF7636
 AF7636.The geoid height was determined by GEOID03.
 AF7636
 AF7636.The dynamic height is computed by dividing the NAVD 88
 AF7636.geopotential number by the normal gravity value computed on the
 AF7636.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AF7636.degrees latitude (g = 980.6199 gals.).
 AF7636
 AF7636.The modeled gravity was interpolated from observed gravity values.
 AF7636
 AF7636;                    North         East      Units Scale Factor Converg.
 AF7636;SPC FL W     -   402,280.424   258,228.017   MT  0.99998301   +0 16 39.0
 AF7636;SPC FL W     - 1,319,815.02    847,203.09    sFT  0.99998301   +0 16 39.0
 AF7636;SPC FL E     -   402,206.497   159,837.834   MT  0.99996108   -0 11 29.1
 AF7636;SPC FL E     - 1,319,572.48    524,401.29    sFT  0.99996108   -0 11 29.1
 AF7636;UTM  17      - 3,093,201.247   459,851.537   MT  0.99961989   -0 11 29.1
 AF7636
 AF7636!             -  Elev Factor  x  Scale Factor =   Combined Factor
 AF7636!SPC FL W     -   1.00000123  x   0.99998301  =   0.99998424
 AF7636!SPC FL E     -   1.00000123  x   0.99996108  =   0.99996231
 AF7636!UTM  17      -   1.00000123  x   0.99961989  =   0.99962112
 AF7636
 AF7636                          SUPERSEDED SURVEY CONTROL
 AF7636
 AF7636  NAD 83(1990)-  27 57 47.79078(N)    081 24 29.49910(W) AD(       ) 2
 AF7636  ELLIP H (12/04/92)   -7.85   (m)                        GP(       ) 3 2
 AF7636  NGVD 29 (12/04/92)   19.6    (m)           64.     (f) GPS OBS
 AF7636
 AF7636.Superseded values are not recommended for survey control.
 AF7636.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AF7636.See file dsdata.txt to determine how the superseded data were derived.
```

AF7636
AF7636_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML5985293201(NAD 83)
AF7636_MARKER: F = FLANGE-ENCASED ROD
AF7636_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
AF7636_SP_SET: STAINLESS STEEL ROD
AF7636_STAMPING: K 107 1991
AF7636_MARK LOGO: NGS
AF7636_PROJECTION: RECESSED 36 CENTIMETERS
AF7636_MAGNETIC: N = NO MAGNETIC MATERIAL
AF7636_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AF7636_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AF7636+SATELLITE: SATELLITE OBSERVATIONS - April 18, 2005
AF7636_ROD/PIPE-DEPTH: 11 meters
AF7636

AF7636	HISTORY	- Date	Condition	Report By
AF7636	HISTORY	- 1991	MONUMENTED	KEISCH
AF7636	HISTORY	- 19970210	GOOD	USPSQD
AF7636	HISTORY	- 20010118	GOOD	FLDEP
AF7636	HISTORY	- 20030205	GOOD	USPSQD
AF7636	HISTORY	- 20030922	GOOD	FL-105
AF7636	HISTORY	- 20050418	GOOD	INDIV

AF7636
AF7636 STATION DESCRIPTION
AF7636
AF7636'DESCRIBED BY KEITH AND SCHNARS - LAKELAND 1991
AF7636'THE STATION IS LOCATED ABOUT 12.5 MI (20.1 KM) NORTHEAST OF LAKE WALES
AF7636'IN THE EAST RIGHT-OF-WAY OF CAMP MACK ROAD IN SECTION 15, TOWNSHIP 29
AF7636'SOUTH, RANGE 29 EAST, POLK COUNTY, FLORIDA.
AF7636'TO REACH THE STATION FROM THE INTERSECTION OF S.R. 60 AND U.S. 27 IN
AF7636'LAKE WALES, GO EAST ON S.R. 60 FOR 9.5 MI (15.3 KM) TO THE
AF7636'INTERSECTION OF S.R. 60 AND BOY SCOUT ROAD. TURN LEFT AND GO NORTH ON
AF7636'BOY SCOUT ROAD 3.5 MI (5.6 KM) TO THE INTERSECTION OF BOY SCOUT ROAD
AF7636'AND CAMP MACK ROAD. TURN RIGHT AND GO NORTHEAST ON CAMP MACK ROAD 3.4
AF7636'MI (5.5 KM) TO THE STATION IN THE EAST RIGHT-OF-WAY. THE STATION LIES
AF7636'8.5 FT (2.6 M) SOUTHEAST OF THE SOUTHEAST EDGE OF PAVEMENT, 24.4 FT
AF7636'(7.4 M) WEST OF A BARBWIRE FENCE, AND 54.5 FT (16.6 M) NORTHEAST OF A
AF7636'POWER POLE (NUMBER 6-12858). ACCESS TO DATUM POINT--THE STATION IS
AF7636'RECESSED 1.2 FT (0.4 M) BELOW GROUND INSIDE A NGS LOGO CAP WHICH IS
AF7636'MOUNTED ON A 5 1/4 INCH DIAMETER PVC PIPE SET IN A CONCRETE COLLAR.
AF7636'REFERENCES--
AF7636'KEITH AND SCHNARS NAIL AND DISC, SET IN POWER POLE (NUMBER 6-12858),
AF7636'SOUTH 31 DEGREES WEST AT 54.54 FT (16.62 M).
AF7636'KEITH AND SCHNARS NAIL AND DISC, SET AT EDGE OF PAVEMENT, SOUTH 79
AF7636'DEGREES WEST AT 18.90 FT (5.76 M).
AF7636'KEITH AND SCHNARS NAIL AND DISC, SET AT EDGE OF PAVEMENT, NORTH 27
AF7636'DEGREES EAST AT 22.01 FT (6.71 M).
AF7636'KEITH AND SCHNARS NAIL AND DISC, SET IN FENCE POST, SOUTH 73 DEGREES
AF7636'EAST AT 30.23 FT (9.21 M).
AF7636'SET CARSONITE WITNESS POST, SOUTH 31 DEGREES EAST AT 24.38 FT
AF7636'(7.43 M).
AF7636
AF7636 STATION RECOVERY (1997)
AF7636
AF7636'RECOVERY NOTE BY US POWER SQUADRON 1997
AF7636'RECOVERED IN GOOD CONDITION.
AF7636
AF7636 STATION RECOVERY (2001)
AF7636
AF7636'RECOVERY NOTE BY FL DEPT OF ENV PRO 2001 (JLM)
AF7636'THE MARK IS ABOUT 14.8 MI (23.8 KM) EAST-NORTHWEST OF LAKE WALES, IN
AF7636'SECTION 15, TOWNSHIP 29 SOUTH, RANGE 29 EAST. TO REACH THE MARK FROM
AF7636'THE INTERSECTION OF STATE ROAD 27 AND STATE ROAD 60 IN LAKE WALES, GO
AF7636'EAST-SOUTHEAST ON STATE ROAD 60 FOR 7.3 MI (11.7 KM) TO THE JUNCTION
AF7636'OF MAMMOTH GROVE ROAD ON THE LEFT, TURN LEFT ON MAMMOTH GROVE ROAD AND
AF7636'GO NORTH FOR 2.05 MI (3.30 KM) TO THE JUNCTION OF CAMP MACK ROAD ON
AF7636'THE RIGHT, TURN RIGHT ON CAMP MACK ROAD AND GO NORTH FOR 0.25 MI (0.40
AF7636'KM) TO A CURVE EAST, CONTINUE EAST ON CAMP MACK ROAD FOR 2.3 MI (3.7
AF7636'KM) TO THE JUNCTION OF BARNEY KEEN ROAD (BOY SCOUT ROAD) ON THE RIGHT,
AF7636'CONTINUE NORTHEASTERLY ON CAMP MACK ROAD FOR 3.4 MI (5.5 KM) TO THE
AF7636'MARK ON THE RIGHT, A STAINLESS STEEL ROD DRIVEN INTO THE GROUND WITH A
AF7636'NGS LOGO CAP RECESSED 1.2 FT (0.4 M) BELOW THE LEVEL OF THE GROUND AND
AF7636'BELOW THE LEVEL OF CAMP MACK ROAD, THE DATUM POINT IS RECESSED 0.3 FT
AF7636'(9.1 CM) BELOW THE LEVEL OF THE NGS LOGO CAP. LOCATED 89.0 FT (27.1 M)
AF7636'WEST-SOUTHWEST OF POWER POLE NUMBER FPC B11505, 25.0 FT (7.6 M) WEST
AF7636'OF A BARBWIRE FENCE, 24.4 FT (7.4 M) NORTHWEST OF A CARSONITE WITNESS
AF7636'POST, 19.4 FT (5.9 M) SOUTHEAST OF THE APPROXIMATE CENTERLINE OF CAMP
AF7636'MACK ROAD AND 8.5 FT (2.6 M) SOUTHEAST OF THE SOUTHEAST EDGE OF THE
AF7636'PAVEMENT. NOTE ACCESS TO THE DATUM POINT IS HAD THROUGH A 5-INCH NGS
AF7636'LOGO CAP.
AF7636
AF7636 STATION RECOVERY (2003)

AF7636
AF7636'RECOVERY NOTE BY US POWER SQUADRON 2003 (AFA)
AF7636'RECOVERED IN GOOD CONDITION.
AF7636
AF7636 STATION RECOVERY (2003)
AF7636
AF7636'RECOVERY NOTE BY POLK COUNTY FLORIDA 2003 (RWY)
AF7636'RECOVERED AS DESCRIBED. RECOVERY NOTE BY POLK COUNTY PROPERTY
AF7636'APPRAISER GIS DEPARTMENT.
AF7636
AF7636 STATION RECOVERY (2005)
AF7636
AF7636'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2005 (ADJ)
AF7636'RECOVERED IN GOOD CONDITION.

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

The NGS Data Sheet

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

```
PROGRAM = datasheet95, VERSION = 8.8
1        National Geodetic Survey,   Retrieval Date = NOVEMBER 10, 2015
 AF7020 ***********************************************************************
 AF7020  DESIGNATION -  POL 16 FLDNR
 AF7020  PID         -  AF7020
 AF7020  STATE/COUNTY-  FL/POLK
 AF7020  COUNTRY     -  US
 AF7020  USGS QUAD   -  HESPERIDES (1972)
 AF7020
 AF7020                        *CURRENT SURVEY CONTROL
 AF7020
 AF7020* NAD 83(1986) POSITION- 27 57 27.     (N) 081 24 53.     (W)    SCALED
 AF7020* NAVD 88 ORTHO HEIGHT -    19.299 (meters)       63.32  (feet) ADJUSTED
 AF7020
 AF7020  GEOID HEIGHT    -        -27.143 (meters)                     GEOID12B
 AF7020  DYNAMIC HEIGHT  -         19.270 (meters)       63.22  (feet) COMP
 AF7020  MODELED GRAVITY -    979,148.6   (mgal)                       NAVD 88
 AF7020
 AF7020  VERT ORDER      -  SECOND    CLASS II
 AF7020
 AF7020.The horizontal coordinates were scaled from a topographic map and have
 AF7020.an estimated accuracy of +/- 6 seconds.
 AF7020.
 AF7020.The orthometric height was determined by differential leveling and
 AF7020.adjusted by the NATIONAL GEODETIC SURVEY
 AF7020.in June 1991.
 AF7020
 AF7020.Significant digits in the geoid height do not necessarily reflect accuracy.
 AF7020.GEOID12B height accuracy estimate available here.
 AF7020
 AF7020.The dynamic height is computed by dividing the NAVD 88
 AF7020.geopotential number by the normal gravity value computed on the
 AF7020.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AF7020.degrees latitude (g = 980.6199 gals.).
 AF7020
 AF7020.The modeled gravity was interpolated from observed gravity values.
 AF7020
 AF7020;                    North         East     Units  Estimated Accuracy
 AF7020;SPC FL W     -   401,640.      257,590.      MT  (+/- 180 meters Scaled)
 AF7020
 AF7020                          SUPERSEDED SURVEY CONTROL
 AF7020
 AF7020  NGVD 29 (09/01/92)   19.667  (m)           64.52   (f) ADJUSTED    2 2
 AF7020
 AF7020.Superseded values are not recommended for survey control.
 AF7020
 AF7020.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AF7020.See file dsdata.txt to determine how the superseded data were derived.
 AF7020
 AF7020_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML592925(NAD 83)
 AF7020
 AF7020_MARKER: DB = BENCH MARK DISK
 AF7020_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 AF7020_STAMPING: POL 16 1983 BSM
 AF7020_MARK LOGO: FLDNR
 AF7020_PROJECTION: FLUSH
 AF7020_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

```
AF7020+STABILITY: SURFACE MOTION
AF7020_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR
AF7020+SATELLITE: SATELLITE OBSERVATIONS - April 18, 2005
AF7020
AF7020  HISTORY     - Date     Condition        Report By
AF7020  HISTORY     - 1983     MONUMENTED       FLDNR
AF7020  HISTORY     - 19950816 MARK NOT FOUND   USPSQD
AF7020  HISTORY     - 20020304 POOR             PICKET
AF7020  HISTORY     - 20030922 GOOD             FL-105
AF7020  HISTORY     - 20050418 GOOD             INDIV
AF7020
AF7020                          STATION DESCRIPTION
AF7020
AF7020'DESCRIBED BY FL DEPT OF NAT RES 1983
AF7020'14.75 MI ENE FROM LAKE WALES.
AF7020'BEGIN IN LAKE WALES AT THE STATE HIGHWAY 60 BRIDGE OVER THE SCL
AF7020'RAILROAD, GO 8.25 MILES EAST ON HIGHWAY 60 TO THE INTERSECTION OF
AF7020'BOY SCOUT ROAD, GO 3.7 MILES NORTH ON BOY SCOUT ROAD TO CAMP MACK
AF7020'ROAD, GO 2.8 MILES EAST ON CAMP MACK ROAD TO THE MARK.
AF7020'THE MARK BEARS 24.0 FEET NORTH OF THE CENTERLINE OF CAMP MACK ROAD,
AF7020'70.0 FEET WEST OF THE CENTERLINE OF A DIRT ROAD (ROLLING MEADOW RANCH
AF7020'ROAD), AND 7.1 FEET WEST OF POWER POLE 621-1.
AF7020
AF7020                          STATION RECOVERY (1995)
AF7020
AF7020'RECOVERY NOTE BY US POWER SQUADRON 1995
AF7020'MARK NOT FOUND.
AF7020
AF7020                          STATION RECOVERY (2002)
AF7020
AF7020'RECOVERY NOTE BY PICKETT AND ASSOCIATES 2002 (HS)
AF7020'BROKEN TOP
AF7020
AF7020                          STATION RECOVERY (2003)
AF7020
AF7020'RECOVERY NOTE BY POLK COUNTY FLORIDA 2003 (RWY)
AF7020'RECOVERED AS DESCRIBED. RECOVERY NOTE BY POLK COUNTY PROPERTY
AF7020'APPRAISER GIS DEPARTMENT. TOP NOT BROKEN OFF. POINT IS BESIDE BROKEN
AF7020'CM
AF7020
AF7020                          STATION RECOVERY (2005)
AF7020
AF7020'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2005 (ADJ)
AF7020'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:05
```

STAR*NET-LEV Version 6.0.25

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Run Date: Mon Apr 25 2005 13:20:44

Summary of Files Used and Option Settings

Project Folder and Data Files

Project Name	SNIVELY
Project Folder	J:\2002\A020801.03\STARNET
Data File List	Sniveley.dat

Project Option Settings

STAR*NET Run Mode	: Adjust with Error Propagation
Type of Adjustment	: Lev
Project Units	: FeetUS
Input/Output Coordinate Order	: North-East
Create Coordinate File	: Yes

Instrument Standard Error Settings

Project Default Instrument	
Differential Levels	: 0.010000 FeetUS / Mile

Listing of Input Data

```
[File: J:\2002\A020801.03\STARNET\SNIVELEY.DAT]
# STAR*DNA Version 4.0.2
# Copyright 2003 Starplus Software, Inc.

# Input Field File : J:\2002\a020801.03\levelpak\SNIVELY\Sniveley.RAW
# Date Processed   : 04-25-2005 13:18:52

.Units  FeetUS
.Sep    -
.3D

#NAVD88 BM ELEVATIONS
E   100    64.01    ! PO9
E   135    61.46    ! K106

#  Elevation Difference Records
#  Stations                              Diff     Dist  Descriptor
L  100-112                           -0.65000   6091
L  112-123                            2.07600   5603
L  123-129                            1.97500   3066
L  129-133                           -3.76000   2395
L  133-135                           -2.18600    757
```

Summary of Unadjusted Input Observations

Number of Entered Stations (FeetUS) = 2

Fixed Stations	Elev	Description
100	64.0100	
135	61.4600	

Number of Differential Level Observations (FeetUS) = 5

From	To	Elev Diff	StdErr	Length
100	112	-0.6500	0.0107	6091
112	123	2.0760	0.0103	5603
123	129	1.9750	0.0076	3066
129	133	-3.7600	0.0067	2395
133	135	-2.1860	0.0038	757

Adjustment Statistical Summary

Number of Stations = 6

Number of Observations = 5
Number of Unknowns = 4
Number of Redundant Obs = 1

Observation	Count	Sum Squares of StdRes	Error Factor
Level Data	5	0.074	0.271
Total	5	0.074	0.271

The Chi-Square Test at 5.00% Level Passed
Lower/Upper Bounds (0.031/2.241)

Adjusted Elevations and Error Propagation (FeetUS)

Station		Elev	StdDev	95%	Description
100		64.0100	0.000000	0.000000	
135		61.4600	0.000000	0.000000	
112		63.3583	0.008725	0.017101	
123	SNRH5	65.4327	0.008768	0.017186	
129	KR1833	67.4069	0.007014	0.013747	
133	KR1832	63.6462	0.003706	0.007263	

Adjusted Observations and Residuals

Adjusted Differential Level Observations (FeetUS)

From	To	Elev Diff	Residual	StdErr	StdRes
100	112	-0.6517	-0.0017	0.0107	0.2
112	123	2.0744	-0.0016	0.0103	0.2
123	129	1.9741	-0.0009	0.0076	0.1
129	133	-3.7607	-0.0007	0.0067	0.1
133	135	-2.1862	-0.0002	0.0038	0.1

Elapsed Time = 00:00:00

```
410041+?......1
110042+00000123 83..11+00065430
110043+00000123 32..01+00022460 331107+00047450 52..07+0003+000
110044+00000201 32..01+00020500 332107+00009296 52..07+0003+003
110045+00000201 573..1+00001960 574..1+00042960 83..01+00069245
110046+00000201 32..01+00020520 331107+00011554 52..07+0003+002
110047+00000123 32..01+00022470 332107+00049713 52..07+0003+000
110048+00000123 573..1+00000010 574..1+00085950 83..01+00065430
```

STAR*DNA Version 4.0.2

Input Field File : J:\2002\a020801.03\levelpak\SNIVELY\SNIVELY-WELL.RAW
Output Data File : J:\2002\a020801.03\STARNET\SNIVELY-WELL.dat
Date Processed : 04-25-2005 13:36:02

Line	Point	Type	E	D	Sum E	Sum D	Desc
3	123	B	4.7450	22.4600	0.0000	0.0000	
4	201	F	0.9296	20.5000	3.8154	42.9600	

Line	Point	Type	E	D	Sum E	Sum D	Desc
6	201	B	1.1554	20.5200	0.0000	0.0000	
7	123	F	4.9713	22.4700	-3.8159	42.9900	

Process completed with 0 errors and 0 warnings.

STAR*NET-LEV Version 6.0.25

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Run Date: Mon Apr 25 2005 13:36:57

Summary of Files Used and Option Settings

Project Folder and Data Files

Project Name	SNIVELY
Project Folder	J:\2002\A020801.03\STARNET
Data File List	SNIVELY-WELL.dat

Project Option Settings

STAR*NET Run Mode	: Adjust with Error Propagation
Type of Adjustment	: Lev
Project Units	: FeetUS
Input/Output Coordinate Order	: North-East
Create Coordinate File	: Yes

Instrument Standard Error Settings

Project Default Instrument

Differential Levels	:	0.010000 FeetUS / Mile

Listing of Input Data

```
[File: J:\2002\A020801.03\STARNET\SNIVELY-WELL.DAT]
# STAR*DNA Version 4.0.2
# Copyright 2003 Starplus Software, Inc.

# Input Field File : J:\2002\a020801.03\levelpak\SNIVELY\SNIVELY-WELL.RAW
# Date Processed   : 04-25-2005 13:36:02

.Units  FeetUS
.Sep    -
.3D

#ADJUSTED NAVD88 ELEVATIONS
E   123   65.43   !

#  Elevation Difference Records
#  Stations                          Diff     Dist  Descriptor
L  123-201                         3.81540     43
L  201-123                        -3.81590     43
```

Summary of Unadjusted Input Observations

Number of Entered Stations (FeetUS) = 1

Fixed Stations	Elev	Description
123	65.4300	

Number of Differential Level Observations (FeetUS) = 2

From	To	Elev Diff	StdErr	Length
123	201	3.8154	0.0009	43
201	123	-3.8159	0.0009	43

Adjustment Statistical Summary

Number of Stations = 2

Number of Observations = 2
Number of Unknowns = 1
Number of Redundant Obs = 1

Observation	Count	Sum Squares of StdRes	Error Factor
Level Data	2	0.153	0.392
Total	2	0.153	0.392

The Chi-Square Test at 5.00% Level Passed
Lower/Upper Bounds (0.031/2.241)

Adjusted Elevations and Error Propagation (FeetUS)

Station	Elev	StdDev	95%	Description
123	65.4300	0.000000	0.000000	
201	69.2457	0.000638	0.001251	

Adjusted Observations and Residuals

Adjusted Differential Level Observations (FeetUS)

From	To	Elev Diff	Residual	StdErr	StdRes
123	201	3.8157	0.0003	0.0009	0.3
201	123	-3.8157	0.0002	0.0009	0.3

Elapsed Time = 00:00:00

```
410001+?......1
110002+00000100 83..11+00064010
110003+00000100 32..01+00294350 331101+00005052
110004+00000001 32..01+00304970 332101+00004733
110005+00000001 573..1-00010620 574..1+00599320 83..01+00064329
110006+00000001 32..01+00304570 331101+00005286
110007+00000002 32..01+00331710 332101+00004985
110008+00000002 573..1-00037770 574..1+01235600 83..01+00064630
110009+00000002 32..01+00331820 331101+00005221
110010+00000003 32..01+00302640 332101+00004333
110011+00000003 573..1-00008590 574..1+01870060 83..01+00065517
110012+00000003 32..01+00334980 331101+00004802
110013+00000004 32..01+00305780 332101+00004812
110014+00000004 573..1+00020610 574..1+02510820 83..01+00065507
110015+00000004 32..01+00306930 331101+00004213
110016+00000005 32..01+00298930 332101+00004876
110017+00000005 573..1+00028610 574..1+03116690 83..01+00064845
110018+00000005 32..01+00052910 331101+00004365
110019+00000006 32..01+00050080 332101+00006007
110020+00000006 573..1+00031450 574..1+03219670 83..01+00063203
110021+00000006 32..01+00316840 331101+00006694
110022+00000007 32..01+00309910 332101+00004842
110023+00000007 573..1+00038380 574..1+03846420 83..01+00065055
110024+00000007 32..01+00324320 331101+00004530
110025+00000008 32..01+00317700 332101+00005125
110026+00000008 573..1+00045000 574..1+04488430 83..01+00064460
110027+00000008 32..01+00322660 331101+00004941
110028+00000009 32..01+00294320 332101+00005060
110029+00000009 573..1+00073340 574..1+05105410 83..01+00064342
110030+00000009 32..01+00160090 331101+00004377
110031+00000010 32..01+00181210 332101+00007216
110032+00000010 573..1+00052220 574..1+05446720 83..01+00061502
110033+00000010 32..01+00230750 331101+00006736
110034+00000011 32..01+00291280 332101+00004308
110035+00000011 573..1-00008300 574..1+05968750 83..01+00063931
110036+00000011 32..01+00067460 331101+00004026
110037+00000112 32..01+00054520 332101+00004596
110038+00000112 573..1+00004640 574..1+06090730 83..01+00063361
110039+00000112 32..01+00084370 331101+00005134
110040+00000013 32..01+00156030 332101+00004067
110041+00000013 573..1-00067020 574..1+06331140 83..01+00064428
110042+00000013 32..01+00179060 331101+00004975
110043+00000014 32..01+00286690 332101+00003834
110044+00000014 573..1-00174650 574..1+06796880 83..01+00065569
110045+00000014 32..01+00278500 331101+00005722
110046+00000015 32..01+00256200 332101+00004479
110047+00000015 573..1-00152350 574..1+07331590 83..01+00066812
110048+00000015 32..01+00299190 331101+00005459
110049+00000016 32..01+00272930 332101+00005181
110050+00000016 573..1-00126090 574..1+07903710 83..01+00067090
110051+00000016 32..01+00319180 331101+00004958
110052+00000017 32..01+00252900 332101+00004598
110053+00000017 573..1-00059810 574..1+08475780 83..01+00067450
110054+00000017 32..01+00319320 331101+00004955
110055+00000018 32..01+00333380 332101+00004242
110056+00000018 573..1-00073880 574..1+09128480 83..01+00068163
110057+00000018 32..01+00319920 331101+00004224
110058+00000019 32..01+00271650 332101+00004895
110059+00000019 573..1-00025600 574..1+09720050 83..01+00067492
110060+00000019 32..01+00305680 331101+00004594
110061+00000020 32..01+00187400 332101+00004571
110062+00000020 573..1+00092680 574..1+10213140 83..01+00067515
110063+00000020 32..01+00307850 331101+00004321
110064+00000021 32..01+00304850 332101+00005744
110065+00000021 573..1+00095680 574..1+10825830 83..01+00066092
110066+00000021 32..01+00214800 331101+00004899
110067+00000022 32..01+00290150 332101+00004877
```

```
110068+00000022 573..1+00020330 574..1+11330780 83..01+00066114
110069+00000022 32..01+00278880 331101+00004029
110070+00000123 32..01+00083680 332101+00004706
110071+00000123 573..1+00215530 574..1+11693340 83..01+00065437
110072+00000123 32..01+00083630 331101+00004395
110073+00000024 32..01+00138780 332101+00003838
110074+00000024 573..1+00160380 574..1+11915760 83..01+00065994
110075+00000024 32..01+00292340 331101+00005520
110076+00000025 32..01+00283410 332101+00004149
110077+00000025 573..1+00169310 574..1+12491500 83..01+00067366
110078+00000025 32..01+00276970 331101+00003935
110079+00000026 32..01+00301540 332101+00004165
110080+00000026 573..1+00144740 574..1+13070010 83..01+00067136
110081+00000026 32..01+00321530 331101+00005023
110082+00000027 32..01+00188430 332101+00005027
110083+00000027 573..1+00277840 574..1+13579970 83..01+00067132
110084+00000027 32..01+00298620 331101+00004928
110085+00000028 32..01+00293620 332101+00004034
110086+00000028 573..1+00282840 574..1+14172200 83..01+00068025
110087+00000028 32..01+00292440 331101+00004731
110088+00000129 32..01+00295180 332101+00005344
110089+00000129 573..1+00280100 574..1+14759830 83..01+00067412
110090+00000129 32..01+00298840 331101+00004758
110091+00000030 32..01+00293050 332101+00004820
110092+00000030 573..1+00285890 574..1+15351720 83..01+00067351
110093+00000030 32..01+00300960 331101+00005307
110094+00000031 32..01+00300900 332101+00005103
110095+00000031 573..1+00285950 574..1+15953580 83..01+00067555
110096+00000031 32..01+00319030 331101+00004431
110097+00000032 32..01+00285080 332101+00005230
110098+00000032 573..1+00319890 574..1+16557690 83..01+00066756
110099+00000032 32..01+00289970 331101+00004021
110100+00000133 32..01+00307170 332101+00007124
110101+00000133 573..1+00302690 574..1+17154840 83..01+00063653
110102+00000133 32..01+00217480 331101+00004590
110103+00000034 32..01+00137780 332101+00004760
110104+00000034 573..1+00382400 574..1+17510100 83..01+00063482
110105+00000034 32..01+00191480 331101+00004673
110106+00000135 32..01+00210650 332101+00006689
110107+00000135 573..1+00363230 574..1+17912230 83..01+00061466
```

STAR*DNA Version 4.0.2

Input Field File : J:\2002\a020801.03\levelpak\SNIVELY\Sniveley.RAW
Output Data File : J:\2002\a020801.03\STARNET\Sniveley.dat
Date Processed : 04-25-2005 13:18:52

Line	Point	Type	E	D	Sum E	Sum D	Desc
3	100	B	5.0520	294.3500	0.0000	0.0000	
4		F	4.7330	304.9700	0.3190	599.3200	
6		B	5.2860	304.5700			
7		F	4.9850	331.7100	0.6200	1235.6000	
9		B	5.2210	331.8200			
10		F	4.3330	302.6400	1.5080	1870.0600	
12		B	4.8020	334.9800			
13		F	4.8120	305.7800	1.4980	2510.8200	
15		B	4.2130	306.9300			
16		F	4.8760	298.9300	0.8350	3116.6800	
18		B	4.3650	52.9100			
19		F	6.0070	50.0800	-0.8070	3219.6700	
21		B	6.6940	316.8400			
22		F	4.8420	309.9100	1.0450	3846.4200	
24		B	4.5300	324.3200			
25		F	5.1250	317.7000	0.4500	4488.4400	
27		B	4.9410	322.6600			
28		F	5.0600	294.3200	0.3310	5105.4200	
30		B	4.3770	160.0900			
31		F	7.2160	181.2100	-2.5080	5446.7200	
33		B	6.7360	230.7500			
34		F	4.3080	291.2800	-0.0800	5968.7500	
36		B	4.0260	67.4600			
37	112	F	4.5960	54.5200	-0.6500	6090.7300	

Line	Point	Type	E	D	Sum E	Sum D	Desc
39	112	B	5.1340	84.3700	0.0000	0.0000	
40		F	4.0670	156.0300	1.0670	240.4000	
42		B	4.9750	179.0600			
43		F	3.8340	286.6900	2.2080	706.1500	
45		B	5.7220	278.5000			
46		F	4.4790	256.2000	3.4510	1240.8500	
48		B	5.4590	299.1900			
49		F	5.1810	272.9300	3.7290	1812.9700	
51		B	4.9580	319.1800			
52		F	4.5980	252.9000	4.0890	2385.0500	
54		B	4.9550	319.3200			
55		F	4.2420	333.3800	4.8020	3037.7500	
57		B	4.2240	319.9200			
58		F	4.8950	271.6500	4.1310	3629.3200	
60		B	4.5940	305.6800			
61		F	4.5710	187.4000	4.1540	4122.4000	
63		B	4.3210	307.8500			
64		F	5.7440	304.8500	2.7310	4735.1000	
66		B	4.8990	214.8000			
67		F	4.8770	290.1500	2.7530	5240.0500	
69		B	4.0290	278.8800			
70	123	F	4.7060	83.6800	2.0760	5602.6100	

Line	Point	Type	E	D	Sum E	Sum D	Desc
72	123	B	4.3950	83.6300	0.0000	0.0000	
73		F	3.8380	138.7800	0.5570	222.4100	
75		B	5.5200	292.3400			
76		F	4.1490	283.4100	1.9280	798.1600	
78		B	3.9350	276.9700			
79		F	4.1650	301.5400	1.6980	1376.6700	
81		B	5.0230	321.5300			
82		F	5.0270	188.4300	1.6940	1886.6300	

84		B	4.9280	298.6200		
85		F	4.0340	293.6200	2.5880	2478.8700
87		B	4.7310	292.4400		
88	129	F	5.3440	295.1800	1.9750	3066.4900

Line	Point	Type	E	D	Sum E	Sum D	Desc
90	129	B	4.7580	298.8400	0.0000	0.0000	
91		F	4.8200	293.0500	-0.0620	591.8900	
93		B	5.3070	300.9600			
94		F	5.1030	300.9000	0.1420	1193.7500	
96		B	4.4310	319.0300			
97		F	5.2300	285.0800	-0.6570	1797.8600	
99		B	4.0210	289.9700			
100	133	F	7.1240	307.1700	-3.7600	2395.0000	

Line	Point	Type	E	D	Sum E	Sum D	Desc
102	133	B	4.5900	217.4800	0.0000	0.0000	
103		F	4.7600	137.7800	-0.1700	355.2600	
105		B	4.6730	191.4800			
106	135	F	6.6890	210.6500	-2.1860	757.3900	

Process completed with 0 errors and 0 warnings.