

SURVEYOR'S REPORT

Specific Purpose Survey of the Stilling Well

Sylvania Site

Miami-Dade County, Florida

South Florida Water Management District's

Purchase Order number 4500008263

Keith and Schnars project number 16434.00,

Task 22179

Report Date: February 23, 2007

Submittal: First

Prepared for:

South Florida Water Management District

Prepared by:



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Licensed Business (L.B.) 1337

SURVEYOR'S REPORT

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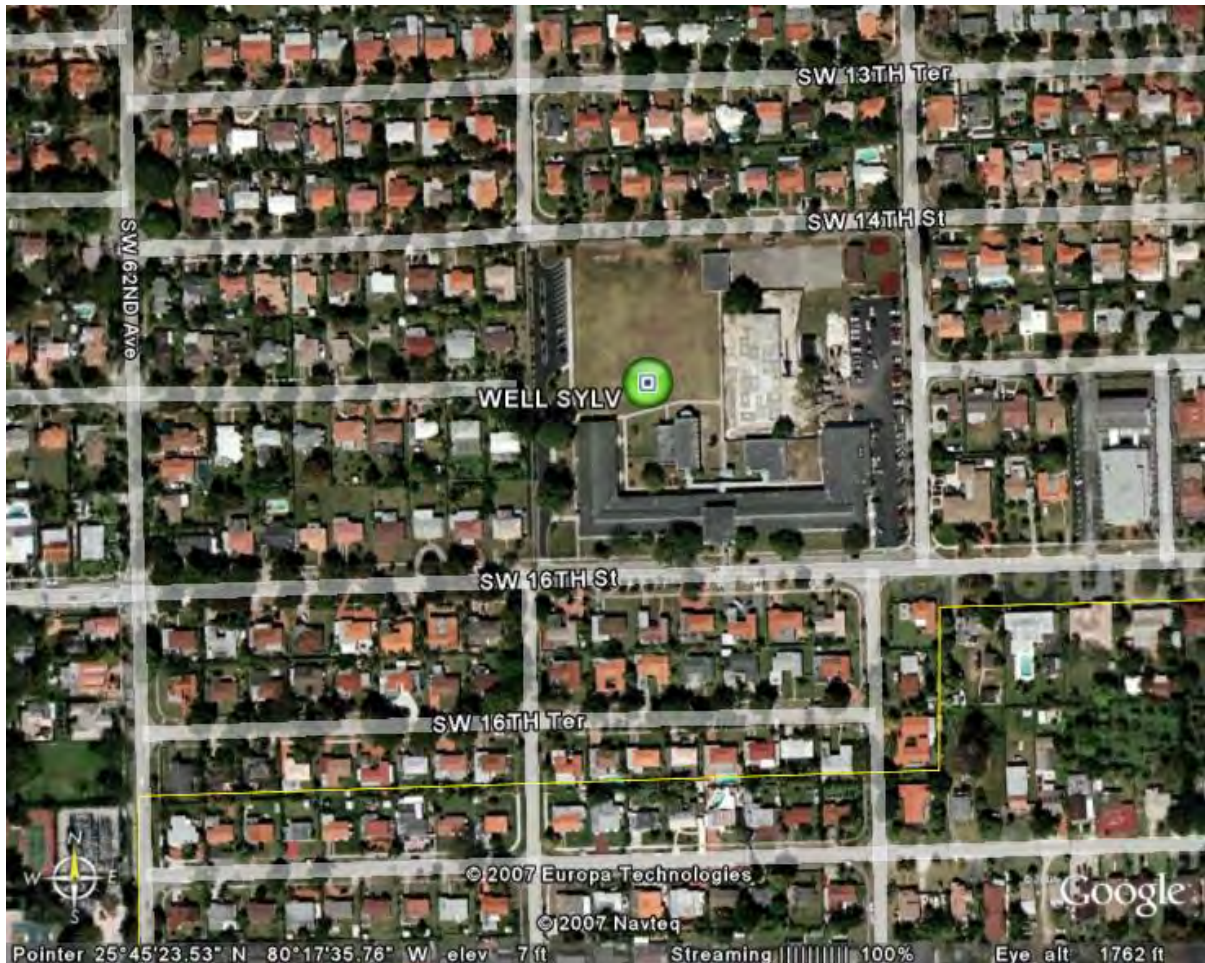
SURVEYOR'S REPORT

PURPOSE

To establish vertical data (NAVD 1988 and NGVD 1929)) on the Stilling Well(s). Set and stamp Brass Tags with Structure, Elevation, Date, Datum, Crew, HW and/or TW. Set a site Benchmark.

LOCATION OF PROJECT

The project is located in Miami-Dade County.



SURVEYOR'S REPORT

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.
6. District Benchmark Sheet.

DATUM FOR THE PROJECT

The vertical datum for the project is National Geodetic Vertical Datum (NGVD) of 1929 and North American Vertical Datum (NAVD) of 1988. NAVD 1988 elevations were taken from the current NGS data sheets for monuments F-238 and D-238 (Sept. 1992 Survey). The NGVD 1929 elevation used for the well elevation and offset (1.508' at benchmark F-238) calculation were provided by Mr. Howard Ehmke of the South Florida Water Management District. The NGVD 1929 values came from the Florida Department of Environmental Protection's first order class 2 level run (Line L26725) along Tamiami Trail (U.S. Hwy 41) from the intersection of Tamiami Trail and State Road 997 to the junction of U.S. highway 1 in South Miami, Florida. The level run was unadjusted at the time of this Report. Shown in the NGVD 1929 section for the vertical control monuments listed below there are two values listed, one value was taken from the current NGS Data Sheet (Sept. 1992 Survey) and the other one was taken from the above mentioned FDEP level run.

LEVELING METHODS

A level loop was run starting at NGS Benchmark F-238, through the site Benchmark (SYLV 2007), through NGS Benchmark D-238 and back to F-238. The well elevations were obtained using the adjusted NGVD 1929 elevation of Benchmark "SYLV 2007".

SURVEYOR'S REPORT

VERTICAL CONTROL

BM F-238	Elevation:	NAVD 1988	9.88'	NGVD 1929 (FDEP level run and not adjusted by NGS yet)	11.383'
Vertical Order First Class II	Latitude	25°45'46" (Scaled)		NGVD 1929 (NGS data sheet)	11.45'
State/County FL/Miami-Dade	Longitude	-80°17'56" (Scaled)			
USGS QUAD Hialeah (1994)					



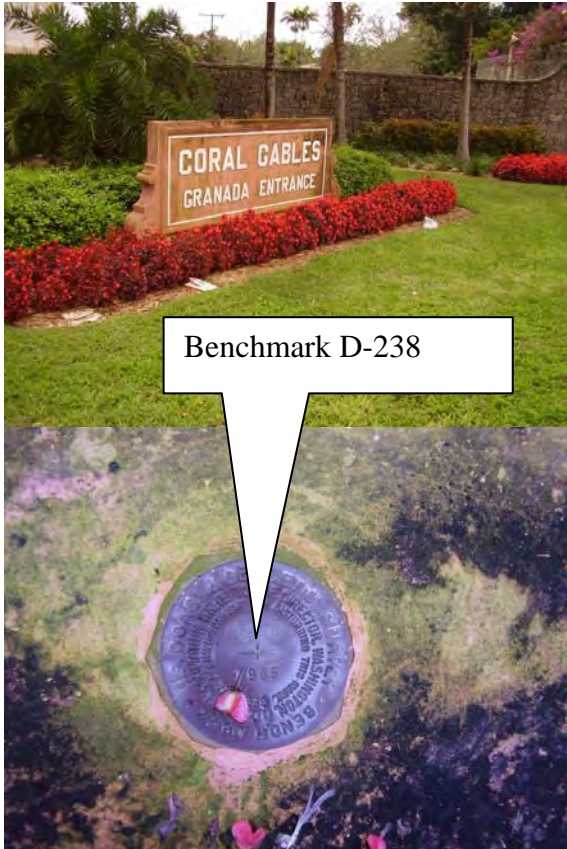
Benchmark F-238

In West Miami, at the intersection of Southwest 8th Street (U.S. Highway 41) and Southwest 63rd Avenue, set vertically in the North face of an Eckerd drug store at 6320 Southwest 8th Street, 73.1 m (239.8 ft) West of the centerline of the avenue, 24.1 m (79.1 ft) South of the centerline of the street, 0.5 m (1.6 ft) above the level of the street, and 0.3 m (1.0 ft) East of the Northwest corner of the store.

SURVEYOR'S REPORT

VERTICAL CONTROL CONT.

BM D-238	Elevation:	NAVD 1988	8.33'	NGVD 1929 (FDEP level run and not adjusted by NGS yet)	9.835'
Vertical Order First Class II	Latitude	25°45'48" (Scaled)		NGVD 1929 (NGS data sheet)	9.90'
State/County FL/Miami-Dade	Longitude	-80°16'31" (Scaled)			
USGS QUAD Hialeah (1994)					



In coral gables, at the intersection of Southwest 8th Street and Granada Boulevard, in top of and near the center of a concrete footing for a sign (Coral Gables Granada entrance), 25.4 m (83.3 ft) South of and level with the centerline of the street, 18.9 m (62.0 ft) West of the center of the boulevard, and 11.8 m (38.7 ft) Southeast of a traffic signal pole.

SURVEYOR'S REPORT

PROJECT RESULTS

Ground Water Well	DTW (Distance to Water)
<p>Reference mark: <u>Found X-Mark Set and Stamped Brass Tag with information below.</u> Mark El. <u>10.77'</u> (NGVD 1929) Initials: <u>K&S</u> Date: <u>02/26/2007</u> Offset : <u>-1.508'</u> (to NAVD 88) (Written with marker not stamped) Reference Mark Elevation(s) written at the mark: El. <u>10.81' NGVD 29</u> Date: <u>10-31-06</u> Initials: <u>EE/GM/AW</u> Reference Mark location: <u>Same as found mark noted above.</u></p>	<p>Reference mark: <u>Same as Fnd. Mark</u> El. <u>10.77'</u> (NGVD 29) Measurement to water: <u>8.2'</u> Date: <u>2/26/07</u> Time: <u>2:15 pm</u> Water Elevation: <u>2.6'</u></p>

SYLVANIA



02/26/07

Keith and Schnars, P.A.
Ground Water Well Tag

SYLVANIA



02/26/07

Keith and Schnars, P.A.

Site Benchmark "SYLV 2007"

SURVEYOR'S REPORT

Comments:

Party Chief: D. Ferels Field Book: 1231 Pages 39-48

Bench Mark: "SYLV 2007" El. 8.563, Vertical Datum: NAVD1988
El. 10.066', Vertical Datum: NGVD1929

Offset: 1.508' SFWMD VALUE (subtract this value to convert to NAVD 1988)

Offset: 1.508' NGS VALUE (subtract this value to convert to NAVD 1988)

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

HW – Head Water (upstream well)

TW – Tail Water (downstream well)

FDEP - Florida Department of Environmental Protection

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
February 26, 2007

Michael M. Mossey, PSM
Professional Surveyor and Mapper
State of Florida
Certificate No. 5660

SYLVANIA



02/26/07

Keith and Schnars, P.A.
Ground Water Well Tag

SYLVANIA



02/26/07

Keith and Schnars, P.A.

Site Benchmark "SYLV 2007"

FEBELS
LALONDE 2-21-07

SYLVANIA
16434.00 22179

NAVD 1988

+ HI - ELEV BMEL
BM 3.700 9.88

(16) 3.470
3.240
3.470 ✓ 13.350 ✓

TP1 5.240

6.000 (16) 5.010

(220) 4.900 4.780

3.800 5.010 ✓ 8.340 ✓

4.900 ✓ 13.240 ✓

TP2 6.900

6.380 (224) 5.780

(241) 5.160 4.660

3.940 ✓ 5.780 ✓ 7.460 ✓

5.160 ✓ 12.620 ✓

TP3 6.490

6.350 (242) 5.280

(250) 5.100 4.070

3.850 5.280 ✓ 7.340 ✓

5.100 ✓ 12.440 ✓

TP4 7.080

6.200 (250) 5.830

(250) 4.950 4.580

3.700 5.830 ✓ 6.610 ✓

4.950 11.560 ✓

1231-39

F 238 FND BRASS DISC IN FACE OF BLDG (CVS)

X-MARK IN B.O.W.

X-MARK IN F.O.W.

X-MARK IN F.O.W.

FERELS	2-21-07		SFWM				
LALONDE			SYLVANIA		NAVD 1988	ADS.	NGVD 1929
	+	H1	-	ELEV	BMEL	ELEV.	
TP5				5.570			
	6.250	(250)		4.320			
(188)	5.310			3.070			
	4.370			4.320	7.240		
	5.310			12.550			
TP 6				6.020			
	6.940	(188)		5.080			
(250)	5.690			4.140			
	4.440			5.080	7.470		
	5.690			13.160			
TP7				6.170			
	6.480	(251)		4.915			
(250)	5.230			3.660			
	3.980			4.915	8.245		
	5.230			13.475			
TP8				6.630			
	6.530	(250)		5.380			
(250)	5.280			4.130			
	4.030			5.380	8.095		
	5.280			13.375			
T.P. 9				6.080			
BM	5.980	(25A)		4.810			
(250)	4.730			3.540			
	3.480			4.810	8.565	8.563	10.071
	4.730			13.295			

1231-40

X-MARK IN B.O.W.

X-MARK IN B.O.W.

X-MARK IN B.O.W.

X-MARK IN F.O.W.

SET SFWM BRASS DISC IN CONC MON.
 STAMPED SYLV 2007
 (OFFSET NAVD 1988 TO NGVD 1929 1.508')

3903

FERCUS 2-21-07 SFWM
 LALONDE SYLVANIA NAUD 1985
 + HI - ELEV BMEL

TP 10
 5.970 (250) 4.400
 (251) 4.715 3.150
 3.460 4.400 ✓ 8.895 ✓
 4.715 ✓ 13.610 ✓

TP 11
 6.390 (250) 5.130
 (250) 5.140 3.880
 3.890 5.130 ✓ 3.480 ✓
 5.140 ✓ 13.620 ✓

TP 12
 5.860 (250) 4.640
 (249) 4.615 3.390
 3.370 4.640 ✓ 8.980 ✓
 4.615 ✓ 13.595 ✓

TP 13
 5.870 (251) 4.595
 (193) 4.905 3.340
 3.940 4.595 ✓ 9.000 ✓
 4.905 ✓ 13.905 ✓

TP 14
 7.500 (195) 5.045
 (251) 6.245 4.070
 4.990 5.045 ✓ 8.860 ✓
 6.245 ✓ 15.105 ✓

1231-41

X-MARK IN F.O.W.

X-MARK IN B.O.W.

X-MARK IN B.O.W.

X-MARK IN CURB

X-MARK IN F.O.W.

S F W M			
PERELS	SYLVANIA		
LALONDE	2-21-07		NAVD 1988
	+	HI	-
			ELEV BMEL
TP15			6.380
	6.280	(250)	6.130
(250)	5.030		3.880
	3.780		5.130
	5.030	15.005	9.975
TP16			6.770
	5.970	(250)	5.520
(252)	4.710		4.270
	3.450		5.520
	4.710	14.195	9.485
TP17			6.470
	6.240	(249)	5.225
(248)	5.000		3.980
	3.760		5.225
	5.000	13.970	8.970
TP18			5.170
	6.190	(250)	3.920
(246)	4.960		2.670
	3.730		3.920
	4.960	15.010	10.050
TP19			6.500
	7.050	(250)	5.250
(238)	5.860		4.000
	4.670		5.250
	5.860	15.620	9.760

1231-42

X-MARK IN F.O.W.

X-MARK IN F.O.W.

X-MARK IN B.O.W.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

FEELS

2-21-07

S F W M

SYLVANIA

LALONDE

NAVD 1988

- +

HI

-

ELEV BMEL

TP 20

6.070

5.810

(236)

4.890

(250) 4.560

3.710

3.310

4.890

10.730

1.560

15.290

TP 21

5.570

6.210

(250)

4.320

(250) 4.960

3.070

3.710

4.320

10.970

4.960

15.930

TP 22

6.590

5.770

(250)

5.340

(250) 4.520

4.090

3.270

5.340

10.590

4.520

15.110

TP 23

6.060

7.590

(250)

4.810

(250) 6.340

3.560

5.090

4.810

10.300

6.340

16.640

TP 24

7.210

6.510

(250)

5.960

(252) 5.280

4.710

4.020

5.960

10.680

5.280

15.960

1231-43

X-MARK IN B.O.C.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

PERELS	2-21-01	PENNSYLVANIA		NAVD 1985
LALONDE	+	HI	-	ELEV BMEL
TP 25				7.400
	4.930	(250)		6.150
(9A)	4.460			4.900
	3.990			6.150
	4.460			9.810
		14.270		
BM TP 26				6.490
	7.870	(106)		5.960
(220)	6.770			5.430
	5.670			5.960
	6.770			8.310
		15.080		
TP 27				5.550
	6.590	(220)		4.450
(250)	5.340			3.350
	4.090			4.450
	5.340			10.630
		15.970		
TP 28				5.980
	5.560	(250)		4.730
(250)	4.310			3.480
	3.060			4.730
	4.310			11.240
		15.550		
TP 29				7.050
	7.470	(250)		5.800
(250)	6.220			4.550
	4.970			5.800
	6.220			9.750
		15.970		

1231-44

X-MARK IN B.O.C.

D 238 FWD BRASS DISC IN CONCRETE FOOTER FOR SIGNAL
(CORNER CABLES GRANADA ENTRANCE)

Y-MARK IN B.O.C.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

FERELS
LALONDE

2-22-07

UP W M
PENNSYLVANIA

NAVD 1988

T HI - ELEV BM EL

TP 30

			6.540	
	6.800	(250)	5.290	
(250)	5.550		4.040	
	4.300		5.290	10.680
	5.550	16.230		

TP 31

			7.480	
	7.380	(250)	6.230	
(250)	6.130		4.980	
	4.880		6.230	10.000
	6.130	16.130		

TP 32

			6.710	
	5.740	(250)	5.460	
(8A)	5.320		4.210	
	4.900		5.460	10.670
	5.320	15.990		

TP 33

			6.390	
	6.230	(82)	5.980	
(250)	4.980		5.570	
	3.730		5.980	10.010
	4.980	14.990		

TP 34

			6.050	
	5.990	(250)	4.800	
(250)	4.740		3.550	
	3.490		4.800	10.190
	4.740	14.930		

1231-45

X-MARK IN B.O.C.

X-MARK IN B.O.C.

X-MARK IN B.O.W.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

FELDS		2-22-07		PENNSYLVANIA	
LALONDE				NAVD 1988	
		HI		ELEV BMEL	
TP 35			5.170		
	5.380	(230)	4.020		
(184)	4.460		2.870		
	3.540		4.020	10.910	✓
	4.460	✓	15.370		
TP 36			6.960		
	6.770	(184)	6.040		
(250)	5.520		5.120		
	4.270	✓	6.040	9.330	✓
	5.520	✓	14.850		
T.P. 37			6.730		
	6.640	(250)	5.480		
(250)	5.390		4.230		
	4.140	✓	5.480	9.370	✓
	5.390	✓	14.760		
TP 38			6.480		
	6.330	(240)	5.280		
(250)	5.080		4.080		
	3.830	✓	5.280	9.480	✓
	5.080	✓	14.560		
TP 39			7.055		
	7.220	(249)	5.810		
(250)	5.970		4.565		
	4.720	✓	5.810	8.750	✓
	5.970	✓	14.720		

1231-46

FND D.O.T. BRASS DISC IN CONC SLAB S.E. COR
 RED RD. ? US 41 (SW 8 ST)
 (STAMP GPS S.R. 959 BT OIL PNOO2)

X-MARK IN B.O.C.

N.E. COR CONC SLAB FOR TRAFFIC SIGNAL CONTROL BOX
 125' WEST OF SW 50 AVE & 7' WEST OF EAST BLUE LINE
 5800 SW 8 ST (US HWY 41) & 4' SOUTH OF SOUTH B.O.C.
 US HWY 41

X-MARK IN B.O.C

X-MARK IN B.O.C

		GFWM			
FEELS	2-26-07	SYLVANIA		NAUD	1988
LAWDE	+	HI	-	ELEV	BMEL ADS. EL
TP 40				7.440	
	6.640	(250)	6.190		
(250)	5.390		4.940		
	4.140		6.190	8.530	
	5.390	13.920			
TP 41				7.070	
	7.150	(250)	5.820		
(250)	5.900		4.570		
	4.650		5.820	8.100	
	5.900	14.000			
TP 42				7.320	
	6.320		5.980		
(200)	5.320	(208)	4.640		
	4.320		5.980	8.020	
	5.320	13.340			
BM				3.690	9.88
F238		(48)	3.450		
			3.210		
			3.450	9.890	

X-MARK IN B.O.C.

X-MARK IN B.O.C.

X-MARK IN B.O.C.

BENCH LOOP TOTAL DIST. = 19,673.00'

ERROR 0.01

ALLOWABLE ERROR 0.058

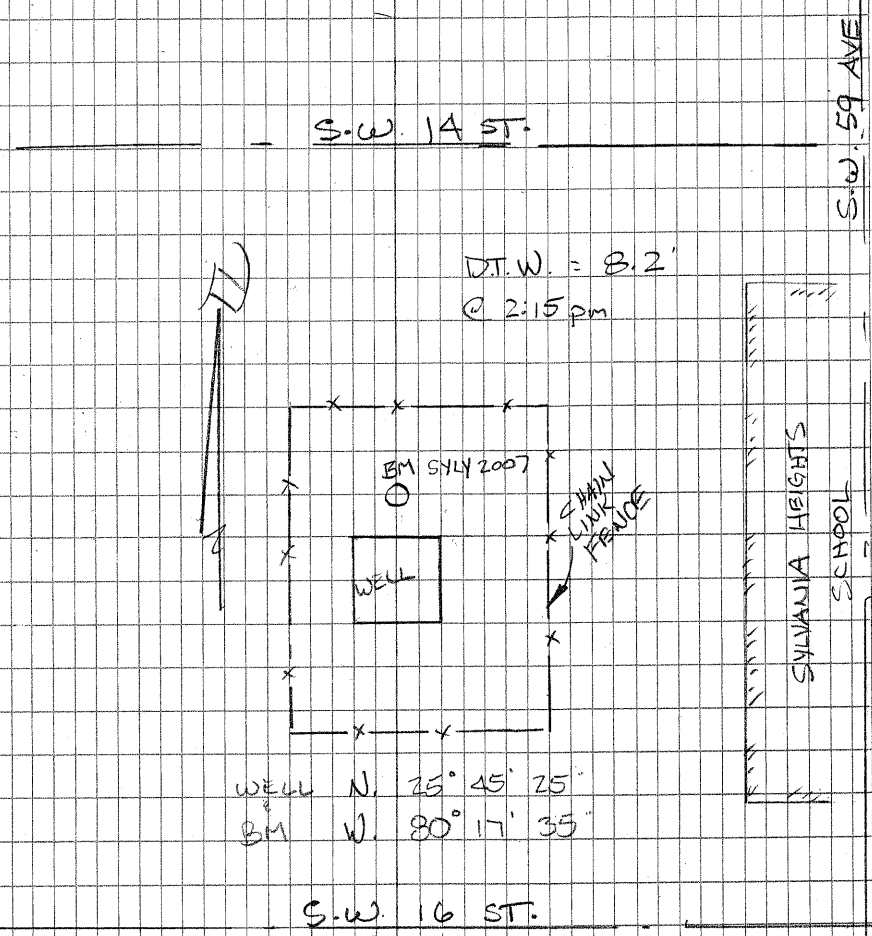
SFWM
 FERELS 2-26-07 SYLVANIA
 LALONDE + MI - NGVD 1929
 ELEV BMEL
 BM 5.34 15.411 10.071
 "SYLV"

WELL 4.64 10.771
 4.670 15.441

BM 5.31 10.071
 "SYLV"

1231-48

PREVIOUS INFO
 FIND MARKER MARK ~~☒~~ (ELEV. 10.81 NGVD 1929 10-31-06 EEF/gha)



SYLVANIA WELL SITE.met

Identifi cation_I nformati on:

Ci tati on:

Ci tati on_I nformati on:

Ori gi nator: Mi chael M. Mossey, P. S. M. (ed.)

Publ i cation_ Date: 20070223

Publ i cation_ Ti me: Unknown

Titl e: S. F. W. M. D. Well Si te Syl vani a

Edi ti on: 1

Publ i cation_I nformati on:

Publ i cation_ Pl ace: Not Publ i shed

Publ i sher: None

Onl i ne_ Li nkage: mmossey@kei thandschnars.com

Descri pti on:

Abstr act:

South Flori da Water Management Di stri ct Well Si te
Syl vani a i n Mi ami -Dade County, Flori da.

Purpo se:

To establi sh NAVD '88, NGVD '29 on the sti lli ng well. Set
and stamp brass tag on well wi th the follo wi ng
i nformati on; El evati on, Datum, Date, Company, Well
number, TW and/or HW. Set a si te benchmar k(SYLV
2007).

Ti me_ Peri od_of_ Content:

Ti me_ Peri od_I nformati on:

Range_of_ Dates/Ti mes:

Bei nni ng_ Date: 20070221

Endi ng_ Date: 20070226

Currentness_ Reference: Publ i cation_ Date

Status:

Progress: Complete

Mai ntenance_ and_ Update_ Frequency: Unknown

Spati al_ Domai n:

Boundi ng_ Coordi nates:

West_ Boundi ng_ Coordi nate: -80° 17' 35"

East_ Boundi ng_ Coordi nate: -80° 17' 35"

North_ Boundi ng_ Coordi nate: 25° 45' 25"

South_ Boundi ng_ Coordi nate: 25° 45' 25"

Keywords:

Theme:

Theme_ Keyword_ Thesaurus: None

Theme_ Keyword: Record Survey

Theme_ Keyword: Well Si te

Pl ace:

Pl ace_ Keyword_ Thesaurus: None

Pl ace_ Keyword: S. F. W. M. D. Si te Syl vani a

Pl ace_ Keyword: SEC. 12- T54S - R40E

Pl ace_ Keyword: Mi ami -Dade County, Flori da

Access_ Constraints: Need key to gain access to well.

Use_ Constraints: See point of contact at SFWMD for access i nformati on.

Poi nt_of_ Contact:

Contact_ I nformati on:

Contact_ Person_ Pri mary:

Contact_ Person: Howard J. Ehmke

Contact_ Organi zati on: South Flori da Water Management

Di stri ct.

Contact_ Posi ti on: P. S. M.

Contact_ Address:

Address_ Type: mai li ng and physical address

Address:

Accel er 8

Sui te 150

2301 Centerpark West Drive

Ci ty: West Palm Beach

Page 1

SYLVANIA WELL SITE.met

State_or_Province: Florida

Postal_Code: 33409

Country: USA

Contact_Voice_Telephone: (561) 242-5520 ext. 4064

Contact_Electronic_Mail_Address: hehmke@sfwmd.gov

Hours_of_Service: 8:00 am to 5:00 pm EST

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

This survey was prepared using GPS and Leveling instruments. The vertical data was collected using a Leica NA 2 Conventional Level. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/90. Elevations are based on NAVD 1988 and NGVD 1929. The horizontal location of the Benchmark was obtained using a hand-held GPS unit.

Logical_Consistency_Report:

Vertical data was established using NGS Benchmarks "D-238", "F-238" and site Benchmark "SYLV 2007".

Completeness_Report:

Benchmark F-238 NAVD 1988 elev. 9.88', NGVD 1929 elev. 11.383'. In West Miami, at the intersection of Southwest 8th Street (U.S. Highway 41) and Southwest 63rd Avenue, set vertically in the North face of a CVS drug store at 6320 Southwest 8th Street, 73.1 m (239.8 ft) West of the centerline of the avenue, 24.1 m (79.1 ft) South of the centerline of the street, 0.5 m (1.6 ft) above the level of the street, and 0.3 m (1.0 ft) East of the Northwest corner of the store.

Benchmark D-238 NAVD 1988 elev. 8.33', NGVD 1929 elev. 9.835'. In coral gables, at the intersection of Southwest 8th Street and Granada Boulevard, in top of and near the center of a concrete footing for a sign (Coral Gables Granada entrance), 25.4 m (83.3 ft) South of and level with the centerline of the street, 18.9 m (62.0 ft) West of the center of the boulevard, and 11.8 m (38.7 ft) Southeast of a traffic signal pole.

Site benchmark "SYLV 2007" 3-1/2" SFWMD brass disk set in poured concrete inside chain link fence NAVD 1988 elev. 8.563', NGVD 1929 elev. 10.071'. From the intersection of the Sunshine State Parkway/Florida's Turnpike and S.R 41 (Tamami Trail) head East on Tamami Trail for 1.56 miles to the intersection of S.W. 62nd Avenue, turn right and head South on 62nd Avenue for 0.39 miles to the intersection of S.W. 14th Street, turn left and head East on S.W. 14th Street for 0.16 miles to an open field adjacent and West of a Sylvania Heights School, the well and benchmark are approximately 270-feet south of the centerline of S.W. 14th Street.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The horizontal position of the site benchmark was established using a hand-held GPS.

Quantitative_Horizontal_Positional_Accuracy_Assessment:

Horizontal_Positional_Accuracy_Value: 3m +/-

Horizontal_Positional_Accuracy_Explanation: Location

of the onsite benchmark only.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

All level runs meet or exceed the required closure

value of

the Square root in miles of the level run multiplied

SYLVANIA WELL SITE.met

by 0.03' .

Quantitative_Vertical_Positional_Accuracy_Assessment:

Vertical_Positional_Accuracy_Value: 0.010ft NAVD88

Vertical_Positional_Accuracy_Expl anati on: Better

than 0.03ft. x sq. root of miles of the Level Loop.

Quantitative_Vertical_Positional_Accuracy_Assessment:

Vertical_Positional_Accuracy_Value: 0.010ft NGVD29

Vertical_Positional_Accuracy_Expl anati on: Better

than 0.03ft. x sq. root of miles of the Level Loop.

Lineage:

Process_Step:

Process_Description:

A level loop was run starting at NGS benchmark F-238 through the site benchmark, SYLV 2007, through NGS benchmark D-238 and back to F-238. The well

elevation

was determined using the adjusted NAVD 1988

elevation

of site benchmark "SYLV 2007" and adding an offset

of

1.508' to obtain the NGVD 1929 elevation for the

work.

The 1.508' offset comes from the difference of the NAVD 1988 value and the NGVD 1929 value of NGS benchmark F-238. The NGVD 1929 value came from the Florida Department of Environmental Protection first

order

class 2 level run (Line L26725) along Tamiami Trail

(U. S.

Hwy 41) from the intersection of Tamiami State Road

997

to the junction of U. S. highway 1 in South Miami ,

Florida.

At the time of this survey the NAVD 1988 values of

level

Line L26725 were being adjusted by NGS.

Process_Date: 20070226

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 25° 36' 40"

Longitude_Resolution: -80° 30' 34"

Geographic_Coordinate_Units: Degrees, minutes, and decimal

seconds

Vertical_Coordinate_System_Definition:

Altitude_System_Definition:

Altitude_Datum_Name: National Geodetic Vertical Datum of

1929

Altitude_Resolution: 0.0

Altitude_Distance_Units: Feet

Altitude_Encoding_Method: Explicit elevation coordinate

included with horizontal coordinates

Metadata_Reference_Information:

Metadata_Date: 20070226

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Michael M. Mossey, P. S. M.

Contact_Organization: Keith and Schnars

Contact_Position: Project Surveyor

Contact_Address:

Address_Type: mailing and physical address

Address: 6500 North Andrews Ave

SYLVANIA WELL SITE.met

City: Ft. Lauderdale

State_or_Province: FL

Postal_Code: 33309-2132

Country: USA

Contact_Voice_Telephone: (954)776-1616

Contact_Facsimile_Telephone: (954)351-7643

Contact_Electronic_Mail_Address: mmossey@keithandschnars.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



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY Miami-Dade	PROJECT STRIVE	DESIGNATION Structure : Sylvania	
SECTION 12	TOWNSHIP 54 SOUTH	RANGE 40 EAST	
GEOGRAPHIC INDEX OF QUAD			
Established by: D. Ferels, Keith & Schnars.		NAME OF QUADRANGLE Hialeah (1994)	
SURVEYOR D. Ferels (Keith and Schnars) DATE <u>02/26/2007</u>		FIELD BOOK 1231 pgs. 39-47	
HORIZONTAL DATUM: 1983 ZONE East			
VERTICAL DATUM: NGVD 1929 and NAVD 1988			
CONTROL ACCURACY: HORIZONTAL Coordinates by Hand-Held GPS (+/- 3-meter), 3rd Order VERTICAL			
STATE PLANE COORDINATES	X = 888842	Y = 517976	EL. (NGVD 1929) 10.066' EL. (NAVD 1988) 8.563'
LATITUDE <u>25°45'25.2"</u>		LONGITUDE <u>-80°17'35"</u>	
DESCRIPTION			
South Florida Water Management District 3-1/2" brass disk set in poured concrete and stamped "SYLV 2007".			
From the intersection of the Sunshine State Parkway/Florida's Turnpike and S.R 41 (Tamami Trail) head East on Tamiami Trail for 1.56 miles to the intersection of S.W. 62 nd Avenue, turn right and head South on 62 nd Avenue for 0.39 miles to the intersection of S.W. 14 th Street, turn left and head East on S.W. 14 th Street for 0.16 miles to an open field adjacent and West of a Sylvania Heights School, the well and benchmark are approximately 270-feet south of the centerline of S.W. 14 th Street.			
Notable Land marks:,			

SKETCH



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01



The NGS Data Sheet

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

```

DATABASE = ,PROGRAM = datasheet, VERSION = 7.58
1 National Geodetic Survey, Retrieval Date = MARCH 19, 2008
AC2304 *****
AC2304 DESIGNATION - F 238
AC2304 PID - AC2304
AC2304 STATE/COUNTY- FL/MIAMI-DADE
AC2304 USGS QUAD - HIALEAH (1994)
AC2304
AC2304 *CURRENT SURVEY CONTROL
AC2304
AC2304* NAD 83(1986)- 25 45 46. (N) 080 17 56. (W) SCALED
AC2304* NAVD 88 - 3.010 (meters) 9.88 (feet) ADJUSTED
AC2304
AC2304 GEOID HEIGHT- -25.13 (meters) GEOID03
AC2304 DYNAMIC HT - 3.005 (meters) 9.86 (feet) COMP
AC2304 MODELED GRAV- 979,033.6 (mgal) NAVD 88
AC2304
AC2304 VERT ORDER - FIRST CLASS I
AC2304
AC2304.The horizontal coordinates were scaled from a topographic map and have
AC2304.an estimated accuracy of +/- 6 seconds.
AC2304
AC2304.The orthometric height was determined by differential leveling
AC2304.and adjusted in September 1992.
AC2304
AC2304.Photographs are available for this station.
AC2304
AC2304.The geoid height was determined by GEOID03.
AC2304
AC2304.The dynamic height is computed by dividing the NAVD 88
AC2304.geopotential number by the normal gravity value computed on the
AC2304.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AC2304.degrees latitude (g = 980.6199 gals.).
AC2304
AC2304.The modeled gravity was interpolated from observed gravity values.
AC2304
AC2304;
AC2304; SPC FL E - North East Units Estimated Accuracy
AC2304; 158,520. 270,330. MT (+/- 180 meters Scaled)
AC2304
AC2304 SUPERSEDED SURVEY CONTROL
AC2304
AC2304 NAVD 88 (06/15/91) 3.010 (m) 9.88 (f) UNKNOWN 1 1
AC2304 NGVD 29 (09/01/92) 3.489 (m) 11.45 (f) ADJUSTED 1 1
AC2304
AC2304.Superseded values are not recommended for survey control.
AC2304.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AC2304.See file dsdata.txt to determine how the superseded data were derived.
AC2304
AC2304_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ703496(NAD 83)
AC2304_MARKER: DB = BENCH MARK DISK
AC2304_SETTING: 36 = SET IN A MASSIVE STRUCTURE
AC2304_SP_SET: BUILDING
AC2304_STAMPING: F 238 1965
AC2304_MARK LOGO: CGS
AC2304_MAGNETIC: N = NO MAGNETIC MATERIAL
AC2304_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AC2304_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR
AC2304+SATELLITE: SATELLITE OBSERVATIONS - March 05, 2005
AC2304
AC2304 HISTORY - Date Condition Report By
AC2304 HISTORY - 1965 MONUMENTED CGS
AC2304 HISTORY - 1986 GOOD USPSQD
AC2304 HISTORY - 1987 GOOD USPSQD
AC2304 HISTORY - 1988 GOOD USPSQD
AC2304 HISTORY - 1990 GOOD USPSQD
AC2304 HISTORY - 19920218 GOOD NGS
AC2304 HISTORY - 19950214 GOOD NGS
AC2304 HISTORY - 20050305 GOOD FLDEP
AC2304

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AC2304 STATION DESCRIPTION
AC2304 DESCRIBED BY COAST AND GEODETIC SURVEY 1965
AC2304 0.5 MI E FROM WEST MIAMI.
AC2304 AT WEST MIAMI, ABOUT 0.5 MILE EAST ALONG U.S. HIGHWAY 41 (SW 8TH
AC2304 STREET) FROM THE TAMiami STATION POST OFFICE AT WEST MIAMI,
AC2304 ABOUT 110 YARDS SOUTHWEST OF THE INTERSECTION OF SW 8TH STREET
AC2304 AND SW 63RD AVENUE, SET VERTICALLY IN THE NORTH CONCRETE FACE
AC2304 OF THE NORTHWEST CORNER OF THE REFRIGERATOR ROOM OF THE A AND P
AC2304 SUPER MARKET, 54 FEET SOUTH OF THE SOUTH CURB OF SW 8TH STREET,
AC2304 0.8 FOOT EAST OF THE NORTHWEST CORNER OF THE BUILDING, 1.7 FEET
AC2304 ABOVE THE LEVEL OF THE BLACK TOPPED AREA AROUND THE STORE AND
AC2304 ABOUT LEVEL WITH THE HIGHWAY. IN SECTION 12, R 40 E, T 54 S.

AC2304 STATION RECOVERY (1986)
AC2304 RECOVERY NOTE BY US POWER SQUADRON 1986 (LEM)
AC2304 RECOVERED IN GOOD CONDITION.

AC2304 STATION RECOVERY (1987)
AC2304 RECOVERY NOTE BY US POWER SQUADRON 1987 (TD)
AC2304 RECOVERED IN GOOD CONDITION.

AC2304 STATION RECOVERY (1988)
AC2304 RECOVERY NOTE BY US POWER SQUADRON 1988 (TD)
AC2304 RECOVERED IN GOOD CONDITION.

AC2304 STATION RECOVERY (1990)
AC2304 RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC2304 RECOVERED IN GOOD CONDITION.

AC2304 STATION RECOVERY (1992)
AC2304 RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992
AC2304 IN WEST MIAMI, AT THE INTERSECTION OF SOUTHWEST 8TH STREET (U.S.
AC2304 HIGHWAY 41) AND SOUTHWEST 63RD AVENUE, SET VERTICALLY IN THE NORTH
AC2304 FACE OF AN ECKERD DRUG STORE AT 6320 SOUTHWEST 8TH STREET, 73.1 M
AC2304 (239.8 FT) WEST OF THE CENTERLINE OF THE AVENUE, 24.1 M (79.1 FT)
AC2304 SOUTH OF THE CENTERLINE OF THE STREET, 0.5 M (1.6 FT) ABOVE THE LEVEL
AC2304 OF THE STREET, AND 0.3 M (1.0 FT) EAST OF THE NORTHWEST CORNER OF THE
AC2304 STORE.

AC2304 STATION RECOVERY (1995)
AC2304 RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (RLT)
AC2304 RECOVERED AS DESCRIBED.

AC2304 STATION RECOVERY (2005)
AC2304 RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (JLM)
AC2304 RECOVERED AS DESCRIBED.



The NGS Data Sheet

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

```

DATABASE = ,PROGRAM = datasheet, VERSION = 7.58
1 National Geodetic Survey, Retrieval Date = MARCH 19, 2008
AC2300 *****
AC2300 DESIGNATION - D 238
AC2300 PID - AC2300
AC2300 STATE/COUNTY- FL/MIAMI-DADE
AC2300 USGS QUAD - HIALEAH (1994)
AC2300
AC2300 *CURRENT SURVEY CONTROL
AC2300
AC2300 *-----*
AC2300 * NAD 83(1986)- 25 45 48. (N) 080 16 31. (W) SCALED
AC2300 * NAVD 88 - 2.540 (meters) 8.33 (feet) ADJUSTED
AC2300 *-----*
AC2300 GEOID HEIGHT- -25.20 (meters) GEOID03
AC2300 DYNAMIC HT - 2.536 (meters) 8.32 (feet) COMP
AC2300 MODELED GRAV- 979,033.3 (mgal) NAVD 88
AC2300
AC2300 VERT ORDER - FIRST CLASS I
AC2300
AC2300.The horizontal coordinates were scaled from a topographic map and have
AC2300.an estimated accuracy of +/- 6 seconds.
AC2300
AC2300.The orthometric height was determined by differential leveling
AC2300.and adjusted in September 1992.
AC2300
AC2300.Photographs are available for this station.
AC2300
AC2300.The geoid height was determined by GEOID03.
AC2300
AC2300.The dynamic height is computed by dividing the NAVD 88
AC2300.geopotential number by the normal gravity value computed on the
AC2300.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AC2300.degrees latitude (g = 980.6199 gals.).
AC2300
AC2300.The modeled gravity was interpolated from observed gravity values.
AC2300
AC2300; North East Units Estimated Accuracy
AC2300;SPC FL E - 158,600. 272,700. MT (+/- 180 meters Scaled)
AC2300
AC2300 SUPERSEDED SURVEY CONTROL
AC2300
AC2300 NAVD 88 (06/15/91) 2.540 (m) 8.33 (f) UNKNOWN 1 1
AC2300 NGVD 29 (09/01/92) 3.018 (m) 9.90 (f) ADJUSTED 1 1
AC2300
AC2300.Superseded values are not recommended for survey control.
AC2300.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AC2300.See file dsdata.txt to determine how the superseded data were derived.
AC2300
AC2300_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ726496(NAD 83)
AC2300_MARKER: DB = BENCH MARK DISK
AC2300_SETTING: 35 = SET IN A MAT FOUNDATION OR CONCRETE SLAB OTHER THAN
AC2300+WITH SETTING: PAVEMENT
AC2300_SP_SET: FOOTING
AC2300_STAMPING: D 238 1965
AC2300_MARK LOGO: CGS
AC2300_MAGNETIC: N = NO MAGNETIC MATERIAL
AC2300_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AC2300+STABILITY: SURFACE MOTION
AC2300_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR
AC2300+SATELLITE: SATELLITE OBSERVATIONS - March 05, 2005
AC2300
AC2300 HISTORY - Date Condition Report By
AC2300 HISTORY - 1965 MONUMENTED CGS
AC2300 HISTORY - 1986 GOOD USPSQD
AC2300 HISTORY - 1987 GOOD USPSQD
AC2300 HISTORY - 1988 GOOD USPSQD
AC2300 HISTORY - 1990 GOOD USPSQD
AC2300 HISTORY - 19920218 GOOD NGS
AC2300 HISTORY - 20050305 GOOD FLDEP

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AC2300
AC2300
AC2300

STATION DESCRIPTION

AC2300 DESCRIBED BY COAST AND GEODETIC SURVEY 1965
AC2300 1.9 MI E FROM WEST MIAMI.
AC2300 ABOUT 1.9 MILES EAST ALONG U.S. HIGHWAY 41 (SW 8TH ST) FROM
AC2300 THE TAMiami STATION POST OFFICE AT WEST MIAMI, ABOUT 4.65 MILES
AC2300 WEST OF THE CROSSING OF THE FLORIDA EAST COAST RAILWAY AT MIAMI,
AC2300 IN SECTION 7, R 41 E, T 54 S, AT THE INTERSECTION OF SW 8TH
AC2300 STREET AND SW 49TH AVENUE, SET ON THE TOP OF THE CONCRETE
AC2300 FOUNDATION OF A SIGN THAT READS CORAL GABLES GRANADA ENTRANCE,
AC2300 62 FEET EAST OF THE EAST CURB OF SW 49TH AVENUE, 36 FEET SOUTH
AC2300 OF THE SOUTH CURB OF SW 8TH STREET, 8 FEET SOUTHWEST OF THE
AC2300 NORTHEAST END OF THE SIGN AND ABOUT LEVEL WITH THE GROUND AND
AC2300 THE HIGHWAY.

AC2300
AC2300
AC2300

STATION RECOVERY (1986)

AC2300 RECOVERY NOTE BY US POWER SQUADRON 1986 (LEM)
AC2300 RECOVERED IN GOOD CONDITION.

AC2300
AC2300
AC2300

STATION RECOVERY (1987)

AC2300 RECOVERY NOTE BY US POWER SQUADRON 1987 (TD)
AC2300 RECOVERED IN GOOD CONDITION.

AC2300
AC2300
AC2300

STATION RECOVERY (1988)

AC2300 RECOVERY NOTE BY US POWER SQUADRON 1988 (TD)
AC2300 RECOVERED IN GOOD CONDITION.

AC2300
AC2300
AC2300

STATION RECOVERY (1990)

AC2300 RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC2300 RECOVERED IN GOOD CONDITION.

AC2300
AC2300
AC2300

STATION RECOVERY (1992)

AC2300 RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992
AC2300 IN CORAL GABLES, AT THE INTERSECTION OF SOUTHWEST 8TH STREET AND
AC2300 GRANADA BOULEVARD, IN TOP OF AND NEAR THE CENTER OF A CONCRETE
AC2300 FOOTING FOR A SIGN (CORAL GABLES GRANADA ENTRANCE), 25.4 M (83.3 FT)
AC2300 SOUTH OF AND LEVEL WITH THE CENTERLINE OF THE STREET, 18.9 M (62.0
AC2300 FT) WEST OF THE CENTER OF THE BOULEVARD, AND 11.8 M (38.7 FT)
AC2300 SOUTHEAST OF A TRAFFIC SIGNAL POLE.

AC2300
AC2300
AC2300

STATION RECOVERY (2005)

AC2300 RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (JLM)
AC2300 RECOVERED AS DESCRIBED.

*** retrieval complete.
Elapsed Time = 00:00:01



SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	3.700												
BM	3.470	3.470	13.350			9.880	9.880						NGS BM F-238
	3.240												
STADIA		46.000											
	6.000			5.240									
TP1	4.900	4.900	13.240	5.010	5.010	8.340		92.00	0.000046765	0.000046765	8.340	2.542	
	3.800			4.780				0.00					
	14.700			15.030				0.00					
STADIA		220.000			46.000								
	6.380			6.900									
TP2	5.160	5.160	12.620	5.780	5.780	7.460		444.00	0.000225690	0.000272455	7.460	2.274	
	3.940			4.660				-4.00					
	15.480			17.340				-4.00					
STADIA		244.000			224.000								
	6.350			6.490									
TP3	5.100	5.100	12.440	5.280	5.280	7.340		486.00	0.000247039	0.000519494	7.339	2.237	
	3.850			4.070				2.00					
	15.300			15.840				-2.00					
STADIA		250.000			242.000								
	6.200			7.080									
TP4	4.950	4.950	11.560	5.830	5.830	6.610		500.00	0.000254155	0.000773649	6.609	2.014	
	3.700			4.580				0.00					
	14.850			17.490				-2.00					
STADIA		250.000			250.000								
	6.250			5.570									
TP5	5.310	5.310	12.550	4.320	4.320	7.240		500.00	0.000254155	0.001027805	7.239	2.206	
	4.370			3.070				0.00					
	15.930			12.960				-2.00					
STADIA		188.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.940			6.020									
TP6	5.690	5.690	13.160	5.080	5.080	7.470		376.00	0.000191125	0.001218929	7.469	2.276	
	4.440			4.140				0.00					
	17.070			15.240				-2.00					
STADIA		250.000			188.000								
	6.480			6.170									
TP7	5.230	5.230	13.475	4.915	4.915	8.245		501.00	0.000254664	0.001473593	8.244	2.513	
	3.980			3.660				-1.00					
	15.690			14.745				-3.00					
STADIA		250.000			251.000								
	6.530			6.630									
TP8	5.280	5.280	13.375	5.380	5.380	8.095		500.00	0.000254155	0.001727749	8.093	2.467	
	4.030			4.130				0.00					
	15.840			16.140				-3.00					
STADIA		250.000			250.000								
	5.980			6.080									
TP9	4.730	4.730	13.295	4.810	4.810	8.565		504.00	0.000256189	0.001983937	8.563	2.610	SET 3-1/2" BRASS SFWMD IN
	3.480			3.540				-4.00					POURED CONC. "SYLV 2007"
	14.190			14.430				-7.00					
STADIA		250.000			254.000								
	5.970			5.650									
TP10	4.715	4.715	13.610	4.400	4.400	8.895		500.00	0.000254155	0.002238093	8.893	2.711	
	3.460			3.150				0.00					
	14.145			13.200				-7.00					
STADIA		251.000			250.000								
	6.390			6.380									
TP11	5.140	5.140	13.620	5.130	5.130	8.480		501.00	0.000254664	0.002492757	8.478	2.584	
	3.890			3.880				1.00					
	15.420			15.390				-6.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	5.860			5.890									
TP12	4.615	4.615	13.595	4.640	4.640	8.980		500.00	0.000254155	0.002746912	8.977	2.736	
	3.370			3.390				0.00					
	13.845			13.920				-6.00					
STADIA		249.000			250.000								
	5.870			5.850									
TP13	4.905	4.905	13.905	4.595	4.595	9.000		500.00	0.000254155	0.003001067	8.997	2.742	
	3.940			3.340				-2.00					
	14.715			13.785				-8.00					
STADIA		193.000			251.000								
	7.500			6.020									
TP14	6.245	6.245	15.105	5.045	5.045	8.860		388.00	0.000197225	0.003198292	8.857	2.700	
	4.990			4.070				-2.00					
	18.735			15.135				-10.00					
STADIA		251.000			195.000								
	6.280			6.380									
TP15	5.030	5.030	15.005	5.130	5.130	9.975		501.00	0.000254664	0.003452956	9.972	3.039	
	3.780			3.880				1.00					
	15.090			15.390				-9.00					
STADIA		250.000			250.000								
	5.970			6.770									
TP16	4.710	4.710	14.195	5.520	5.520	9.485		500.00	0.000254155	0.003707111	9.481	2.890	
	3.450			4.270				0.00					
	14.130			16.560				-9.00					
STADIA		252.000			250.000								
	6.240			6.470									
TP17	5.000	5.000	13.970	5.225	5.225	8.970		501.00	0.000254664	0.003961775	8.966	2.733	
	3.760			3.980				3.00					
	15.000			15.675				-6.00					
STADIA		248.000			249.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.190			5.170									
TP18	4.960	4.960	15.010	3.920	3.920	10.050		498.00	0.000253139	0.004214914	10.046	3.062	
	3.730			2.670				-2.00					
	14.880			11.760				-8.00					
STADIA		246.000			250.000								
	7.050			6.500									
TP19	5.860	5.860	15.620	5.250	5.250	9.760		496.00	0.000252122	0.004467036	9.756	2.973	
	4.670			4.000				-4.00					
	17.580			15.750				-12.00					
STADIA		238.000			250.000								
	5.810			6.070									
TP20	4.560	4.560	15.290	4.890	4.890	10.730		474.00	0.000240939	0.004707975	10.725	3.269	
	3.310			3.710				2.00					
	13.680			14.670				-10.00					
STADIA		250.000			236.000								
	6.210			5.570									
TP21	4.960	4.960	15.930	4.320	4.320	10.970		500.00	0.000254155	0.004962131	10.965	3.342	
	3.710			3.070				0.00					
	14.880			12.960				-10.00					
STADIA		250.000			250.000								
	5.770			6.590									
TP22	4.520	4.520	15.110	5.340	5.340	10.590		500.00	0.000254155	0.005216286	10.585	3.226	
	3.270			4.090				0.00					
	13.560			16.020				-10.00					
STADIA		250.000			250.000								
	7.590			6.060									
TP23	6.340	6.340	16.640	4.810	4.810	10.300		500.00	0.000254155	0.005470442	10.295	3.138	
	5.090			3.560				0.00					
	19.020			14.430				-10.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.540			7.210									
TP24	5.280	5.280	15.960	5.960	5.960	10.680		500.00	0.000254155	0.005724597	10.674	3.254	
	4.020			4.710				0.00					
	15.840			17.880				-10.00					
STADIA		252.000			250.000								
	4.930			7.400									
TP25	4.460	4.460	14.270	6.150	6.150	9.810		502.00	0.000255172	0.005979769	9.804	2.988	
	3.990			4.900				2.00					
	13.380			18.450				-8.00					
STADIA		94.000			250.000								
	7.870			6.490									
TP26	6.770	6.770	15.080	5.960	5.960	8.310		200.00	0.000101662	0.006081431	8.304	2.531	NGS MONUMENT D-238
	5.670			5.430				-12.00					PUBLISHED ELEV. 8.330
	20.310			17.880				-20.00					
STADIA		220.000			106.000								
	6.590			5.550									
TP27	5.340	5.340	15.970	4.450	4.450	10.630		440.00	0.000223657	0.006305088	10.624	3.238	
	4.090			3.350				0.00					
	16.020			13.350				-20.00					
STADIA		250.000			220.000								
	5.560			5.980									
TP28	4.310	4.310	15.550	4.730	4.730	11.240		500.00	0.000254155	0.006559244	11.233	3.424	
	3.060			3.480				0.00					
	12.930			14.190				-20.00					
STADIA		250.000			250.000								
	7.470			7.050									
TP29	6.220	6.220	15.970	5.800	5.800	9.750		500.00	0.000254155	0.006813399	9.743	2.970	
	4.970			4.550				0.00					
	18.660			17.400				-20.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.800			6.540									
TP30	5.550	5.550	16.230	5.290	5.290	10.680		500.00	0.000254155	0.007067555	10.673	3.253	
	4.300			4.040				0.00					
	16.650			15.870				-20.00					
STADIA		250.000			250.000								
	7.380			7.480									
TP31	6.130	6.130	16.130	6.230	6.230	10.000		500.00	0.000254155	0.007321710	9.993	3.046	
	4.880			4.980				0.00					
	18.390			18.690				-20.00					
STADIA		250.000			250.000								
	5.740			6.710									
TP32	5.320	5.320	15.990	5.460	5.460	10.670		500.00	0.000254155	0.007575865	10.662	3.250	
	4.900			4.210				0.00					
	15.960			16.380				-20.00					
STADIA		84.000			250.000								
	6.230			6.390									
TP33	4.980	4.980	14.990	5.980	5.980	10.010		166.00	0.000084380	0.007660245	10.002	3.049	
	3.730			5.570				2.00					
	14.940			17.940				-18.00					
STADIA		250.000			82.000								
	5.990			6.050									
TP34	4.740	4.740	14.930	4.800	4.800	10.190		500.00	0.000254155	0.007914400	10.182	3.104	
	3.490			3.550				0.00					
	14.220			14.400				-18.00					
STADIA		250.000			250.000								
	5.380			5.170									
TP35	4.460	4.460	15.370	4.020	4.020	10.910		480.00	0.000243989	0.008158390	10.902	3.323	FND. FDOT BRASS DISK IN WALK
	3.540			2.870				20.00					S.E. COR. RED RD. & S.W. 8th ST.
	13.380			12.060				2.00					(TAMAMI TRAIL)
STADIA		184.000			230.000								GPS SR 959 87/01/PN002

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.770			6.960									
TP36	5.520	5.520	14.850	6.040	6.040	9.330		368.00	0.000187058	0.008345448	9.322	2.841	
	4.270			5.120				0.00					
	16.560			18.120				2.00					
STADIA		250.000			184.000								
	6.640			6.730									
TP37	5.390	5.390	14.760	5.480	5.480	9.370		500.00	0.000254155	0.008599604	9.361	2.853	
	4.140			4.230				0.00					
	16.170			16.440				2.00					
STADIA		250.000			250.000								
	6.330			6.480									
TP38	5.080	5.080	14.560	5.280	5.280	9.480		490.00	0.000249072	0.008848676	9.471	2.887	
	3.830			4.080				10.00					
	15.240			15.840				12.00					
STADIA		250.000			240.000								
	7.220			7.055									
TP39	5.970	5.970	14.720	5.810	5.810	8.750		499.00	0.000253647	0.009102323	8.741	2.664	
	4.720			4.565				1.00					
	17.910			17.430				13.00					
STADIA		250.000			249.000								
	6.640			7.440									
TP40	5.390	5.390	13.920	6.190	6.190	8.530		500.00	0.000254155	0.009356478	8.521	2.597	
	4.140			4.940				0.00					
	16.170			18.570				13.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NAVD88	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	7.150			7.070									
TP41	5.900	5.900	14.000	5.820	5.820	8.100		500.00	0.000254155	0.009610634	8.090	2.466	
	4.650			4.570				0.00					
	17.700			17.460				13.00					
STADIA		250.000			250.000								
	6.320			7.320									
TP42	5.320	5.320	13.340	5.980	5.980	8.020		268.00	0.000136227	0.009873939	8.010	2.441	
	4.320			4.640				-268.00					
	15.960			17.940				-5.00					
STADIA		200.000			268.000								
				3.690									
BM				3.450	3.450	9.890	9.880	248.00	0.000126061	0.010000000	9.880	3.011	BM CHECK @ NGS BM F-238
				3.210				152.00					
				10.350				147.00					
					48.000								
							LOR=	19673.00	CHECK VALUES TO VERIFY SAME				
									OR TO SEE THEY ARE WITHIN				
	TOTAL +=	9910.000		TOTAL -=	9763.000			19673.00	THIRD ORDER SPECS(MAX DIFF. 33 FT.)				
					147.00								
					RAW CLOSURE=		0.010						
					ERROR PER FOOT=		0.000						
					MTS ALLOWABLE ERROR FOR THIRD ORDER=		0.058						
					ACTUAL ERROR=		0.010		RED IF BAD-----GREEN IF GOOD				

copy and insert to expand worksheet

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	3.700												
BM	3.470	3.470	14.853			11.383	11.383						NGS BM F-238
	3.240												
STADIA		46.000											
	6.000			5.240									
TP1	4.900	4.900	14.743	5.010	5.010	9.843		92.00	0.000046765	0.000046765	9.843	3.000	
	3.800			4.780				0.00					
	14.700			15.030				0.00					
STADIA		220.000			46.000								
	6.380			6.900									
TP2	5.160	5.160	14.123	5.780	5.780	8.963		444.00	0.000225690	0.000272455	8.963	2.732	
	3.940			4.660				-4.00					
	15.480			17.340				-4.00					
STADIA		244.000			224.000								
	6.350			6.490									
TP3	5.100	5.100	13.943	5.280	5.280	8.843		486.00	0.000247039	0.000519494	8.842	2.695	
	3.850			4.070				2.00					
	15.300			15.840				-2.00					
STADIA		250.000			242.000								
	6.200			7.080									
TP4	4.950	4.950	13.063	5.830	5.830	8.113		500.00	0.000254155	0.000773649	8.112	2.473	
	3.700			4.580				0.00					
	14.850			17.490				-2.00					
STADIA		250.000			250.000								
	6.250			5.570									
TP5	5.310	5.310	14.053	4.320	4.320	8.743		500.00	0.000254155	0.001027805	8.742	2.665	
	4.370			3.070				0.00					
	15.930			12.960				-2.00					
STADIA		188.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.940			6.020									
TP6	5.690	5.690	14.663	5.080	5.080	8.973		376.00	0.000191125	0.001218929	8.972	2.735	
	4.440			4.140				0.00					
	17.070			15.240				-2.00					
STADIA		250.000			188.000								
	6.480			6.170									
TP7	5.230	5.230	14.978	4.915	4.915	9.748		501.00	0.000254664	0.001473593	9.747	2.971	
	3.980			3.660				-1.00					
	15.690			14.745				-3.00					
STADIA		250.000			251.000								
	6.530			6.630									
TP8	5.280	5.280	14.878	5.380	5.380	9.598		500.00	0.000254155	0.001727749	9.596	2.925	
	4.030			4.130				0.00					
	15.840			16.140				-3.00					
STADIA		250.000			250.000								
	5.980			6.080									
TP9	4.730	4.730	14.798	4.810	4.810	10.068		504.00	0.000256189	0.001983937	10.066	3.068	SET 3-1/2" BRASS SFWMD IN
	3.480			3.540				-4.00					POURED CONC. "SYLV 2007"
	14.190			14.430				-7.00					
STADIA		250.000			254.000								
	5.970			5.650									
TP10	4.715	4.715	15.113	4.400	4.400	10.398		500.00	0.000254155	0.002238093	10.396	3.169	
	3.460			3.150				0.00					
	14.145			13.200				-7.00					
STADIA		251.000			250.000								
	6.390			6.380									
TP11	5.140	5.140	15.123	5.130	5.130	9.983		501.00	0.000254664	0.002492757	9.981	3.042	
	3.890			3.880				1.00					
	15.420			15.390				-6.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	5.860			5.890									
TP12	4.615	4.615	15.098	4.640	4.640	10.483		500.00	0.000254155	0.002746912	10.480	3.194	
	3.370			3.390				0.00					
	13.845			13.920				-6.00					
STADIA		249.000			250.000								
	5.870			5.850									
TP13	4.905	4.905	15.408	4.595	4.595	10.503		500.00	0.000254155	0.003001067	10.500	3.200	
	3.940			3.340				-2.00					
	14.715			13.785				-8.00					
STADIA		193.000			251.000								
	7.500			6.020									
TP14	6.245	6.245	16.608	5.045	5.045	10.363		388.00	0.000197225	0.003198292	10.360	3.158	
	4.990			4.070				-2.00					
	18.735			15.135				-10.00					
STADIA		251.000			195.000								
	6.280			6.380									
TP15	5.030	5.030	16.508	5.130	5.130	11.478		501.00	0.000254664	0.003452956	11.475	3.497	
	3.780			3.880				1.00					
	15.090			15.390				-9.00					
STADIA		250.000			250.000								
	5.970			6.770									
TP16	4.710	4.710	15.698	5.520	5.520	10.988		500.00	0.000254155	0.003707111	10.984	3.348	
	3.450			4.270				0.00					
	14.130			16.560				-9.00					
STADIA		252.000			250.000								
	6.240			6.470									
TP17	5.000	5.000	15.473	5.225	5.225	10.473		501.00	0.000254664	0.003961775	10.469	3.191	
	3.760			3.980				3.00					
	15.000			15.675				-6.00					
STADIA		248.000			249.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.190			5.170									
TP18	4.960	4.960	16.513	3.920	3.920	11.553		498.00	0.000253139	0.004214914	11.549	3.520	
	3.730			2.670				-2.00					
	14.880			11.760				-8.00					
STADIA		246.000			250.000								
	7.050			6.500									
TP19	5.860	5.860	17.123	5.250	5.250	11.263		496.00	0.000252122	0.004467036	11.259	3.432	
	4.670			4.000				-4.00					
	17.580			15.750				-12.00					
STADIA		238.000			250.000								
	5.810			6.070									
TP20	4.560	4.560	16.793	4.890	4.890	12.233		474.00	0.000240939	0.004707975	12.228	3.727	
	3.310			3.710				2.00					
	13.680			14.670				-10.00					
STADIA		250.000			236.000								
	6.210			5.570									
TP21	4.960	4.960	17.433	4.320	4.320	12.473		500.00	0.000254155	0.004962131	12.468	3.800	
	3.710			3.070				0.00					
	14.880			12.960				-10.00					
STADIA		250.000			250.000								
	5.770			6.590									
TP22	4.520	4.520	16.613	5.340	5.340	12.093		500.00	0.000254155	0.005216286	12.088	3.684	
	3.270			4.090				0.00					
	13.560			16.020				-10.00					
STADIA		250.000			250.000								
	7.590			6.060									
TP23	6.340	6.340	18.143	4.810	4.810	11.803		500.00	0.000254155	0.005470442	11.798	3.596	
	5.090			3.560				0.00					
	19.020			14.430				-10.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.540			7.210									
TP24	5.280	5.280	17.463	5.960	5.960	12.183		500.00	0.000254155	0.005724597	12.177	3.712	
	4.020			4.710				0.00					
	15.840			17.880				-10.00					
STADIA		252.000			250.000								
	4.930			7.400									
TP25	4.460	4.460	15.773	6.150	6.150	11.313		502.00	0.000255172	0.005979769	11.307	3.446	
	3.990			4.900				2.00					
	13.380			18.450				-8.00					
STADIA		94.000			250.000								
	7.870			6.490									
TP26	6.770	6.770	16.583	5.960	5.960	9.813		200.00	0.000101662	0.006081431	9.807	2.989	NGS MONUMENT D-238
	5.670			5.430				-12.00					PUBLISHED ELEV. 8.330
	20.310			17.880				-20.00					
STADIA		220.000			106.000								
	6.590			5.550									
TP27	5.340	5.340	17.473	4.450	4.450	12.133		440.00	0.000223657	0.006305088	12.127	3.696	
	4.090			3.350				0.00					
	16.020			13.350				-20.00					
STADIA		250.000			220.000								
	5.560			5.980									
TP28	4.310	4.310	17.053	4.730	4.730	12.743		500.00	0.000254155	0.006559244	12.736	3.882	
	3.060			3.480				0.00					
	12.930			14.190				-20.00					
STADIA		250.000			250.000								
	7.470			7.050									
TP29	6.220	6.220	17.473	5.800	5.800	11.253		500.00	0.000254155	0.006813399	11.246	3.428	
	4.970			4.550				0.00					
	18.660			17.400				-20.00					
STADIA		250.000			250.000								

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.800			6.540									
TP30	5.550	5.550	17.733	5.290	5.290	12.183		500.00	0.000254155	0.007067555	12.176	3.711	
	4.300			4.040				0.00					
	16.650			15.870				-20.00					
STADIA		250.000			250.000								
	7.380			7.480									
TP31	6.130	6.130	17.633	6.230	6.230	11.503		500.00	0.000254155	0.007321710	11.496	3.504	
	4.880			4.980				0.00					
	18.390			18.690				-20.00					
STADIA		250.000			250.000								
	5.740			6.710									
TP32	5.320	5.320	17.493	5.460	5.460	12.173		500.00	0.000254155	0.007575865	12.165	3.708	
	4.900			4.210				0.00					
	15.960			16.380				-20.00					
STADIA		84.000			250.000								
	6.230			6.390									
TP33	4.980	4.980	16.493	5.980	5.980	11.513		166.00	0.000084380	0.007660245	11.505	3.507	
	3.730			5.570				2.00					
	14.940			17.940				-18.00					
STADIA		250.000			82.000								
	5.990			6.050									
TP34	4.740	4.740	16.433	4.800	4.800	11.693		500.00	0.000254155	0.007914400	11.685	3.562	
	3.490			3.550				0.00					
	14.220			14.400				-18.00					
STADIA		250.000			250.000								
	5.380			5.170									
TP35	4.460	4.460	16.873	4.020	4.020	12.413		480.00	0.000243989	0.008158390	12.405	3.781	FND. FDOT BRASS DISK IN WALK
	3.540			2.870				20.00					S.E. COR. RED RD. & S.W. 8th ST.
	13.380			12.060				2.00					(TAMAMI TRAIL)
STADIA		184.000			230.000								GPS SR 959 87/01/PN002

SYLVANIA	16434.00	PARTY CHIEF	D. FERELS	DATE:	2/21-26/2007	Datum:	NGVD29	FIELD BOOK 1231	PAGES 39-47				
STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	6.770			6.960									
TP36	5.520	5.520	16.353	6.040	6.040	10.833		368.00	0.000187058	0.008345448	10.825	3.299	
	4.270			5.120				0.00					
	16.560			18.120				2.00					
STADIA		250.000			184.000								
	6.640			6.730									
TP37	5.390	5.390	16.263	5.480	5.480	10.873		500.00	0.000254155	0.008599604	10.864	3.311	
	4.140			4.230				0.00					
	16.170			16.440				2.00					
STADIA		250.000			250.000								
	6.330			6.480									
TP38	5.080	5.080	16.063	5.280	5.280	10.983		490.00	0.000249072	0.008848676	10.974	3.345	
	3.830			4.080				10.00					
	15.240			15.840				12.00					
STADIA		250.000			240.000								
	7.220			7.055									
TP39	5.970	5.970	16.223	5.810	5.810	10.253		499.00	0.000253647	0.009102323	10.244	3.122	
	4.720			4.565				1.00					
	17.910			17.430				13.00					
STADIA		250.000			249.000								
	6.640			7.440									
TP40	5.390	5.390	15.423	6.190	6.190	10.033		500.00	0.000254155	0.009356478	10.024	3.055	
	4.140			4.940				0.00					
	16.170			18.570				13.00					
STADIA		250.000			250.000								

STATION	3 WIRE	AVG.(ENG)	HI	3 WIRE	AVG.(ENG)	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. ELEV.	METRIC	DESCRIPTION
	7.150			7.070									
TP41	5.900	5.900	15.503	5.820	5.820	9.603		500.00	0.000254155	0.009610634	9.593	2.924	
	4.650			4.570				0.00					
	17.700			17.460				13.00					
STADIA		250.000			250.000								
	6.320			7.320									
TP42	5.320	5.320	14.843	5.980	5.980	9.523		268.00	0.000136227	0.009873939	9.513	2.900	
	4.320			4.640				-268.00					
	15.960			17.940				-5.00					
STADIA		200.000			268.000								
				3.690									
BM				3.450	3.450	11.393	11.383	248.00	0.000126061	0.010000000	11.383	3.470	BM CHECK @ NGS BM F-238
				3.210				152.00					
				10.350				147.00					
					48.000								
							LOR=	19673.00	CHECK VALUES TO VERIFY SAME				
									OR TO SEE THEY ARE WITHIN				
	TOTAL +=	9910.000		TOTAL -=	9763.000			19673.00	THIRD ORDER SPECS(MAX DIFF. 33 FT.)				
					147.00								
					RAW CLOSURE=		0.010						
					ERROR PER FOOT=		0.000						
					MTS ALLOWABLE ERROR FOR THIRD ORDER=		0.058						
					ACTUAL ERROR=		0.010		RED IF BAD-----GREEN IF GOOD				

copy and insert to expand worksheet