SURVEYOR'S REPORT

INTRODUCTION

Weidener Surveying & Mapping, P.A. (WSM), LB4207, operating under the authority of the **South Florida Water Management District (the "District")** as a consultant to the District by Purchase Order No. PC P502140 was tasked with the execution of this Specific Purpose Survey in support of the Biscayne Bay Coastal Wetlands Well Sites**.** The purpose of this survey was to provide horizontal and vertical location at the well sites. **THIS IS NOT A BOUNDARY SURVEY**. This report was revised on 24 August 2005 and supercedes all others of a prior date.

PROJECT LOCATION

The project area is located in southern Miami-Dade County, Florida from the Old Burger King Headquarters site, south of the Deering Estate down the northern reaches of the Model Land Basin. The project sites may be accessed from Old Cutler Road, the Mowry Canal Road and the L-31E Levee Road.

PROJECT APPROACH & EXECUTION

Purchase Order was issued on 24 June 2005 from the District. This was a period of heavy rain in Miami-Dade County which delayed the beginning on work on the project. After some site reconnaissance, WSM recovered sufficient horizontal and vertical control points in the project vicinity. All control meets or exceeds the National Geodetic Survey (NGS) standards for Third Order accuracy and procedural methodology

SCADA Pictures Added 30-nov-15 HJE

and complies with engineering manuals as specified in the Statement of Work issued by the District for this project.

The northern project area contained well sites BBCWMW1A, BBCWMW7A, BBCWMW7B, BBCWMW8A and BBCWMW8B. The southern project area contained well sites BBCWMW2A, BBCWMW3A, BBCWMW3B, BBCWMW4A, BBCWMW5A, BBCWMW6A, BBCWMW6B, BBCWMW9A, BBCWMW9B, BBCWMW10A and BBCWMW10B.

Horizontal location of the wells was achieved through the use of RTK (Real Time Kinematic) GPS (Global Positioning Satellite) Surveying. In the northern area, the horizontal control station used was "TRAV 2" that was from another WSM/SFWMD project at the Deering Estate as part of work for the Deering Flow-way (WSM Project No. 1804-C). In the southern area, the horizontal control station used was National Geodetic Survey (NGS) control point "H098".

Elevations at the wells sites were determined by differential level runs in a closed loop NGS control points. Top of well casing and ground elevations were measured. Elevations at BBCWMW8A, BBCWMW8B, BBCWMW10A and BBCWMW10B were measured by RTK GPS. Those 2 wells are located off-shore in Biscayne Bay and cannot have differential levels run to them. All field work was completed on 16 August 2005.

Pictures were taken of the wells and are included in the project's deliverables package in JPG format or in Microsoft Power Point presentation format.

HORIZONTAL and VERTICAL CONTROL

Horizontal control is based on the State Plane Coordinate System, Florida East Zone, North American Datum of 1983. A handheld GPS coordinates were provided by the District to assist in navigating to the wells. Many of these coordinates were erroneous.

Vertical control is based on the North American Vertical Datum of 1988. All vertical control used was 3nd Order. Closed level runs were used with all precision meeting or exceeding third order standards. The offset to convert NAVD 88 elevations to NGVD 29 varies throughout the project area. No benchmarks were set.

ISSUES AND PROBLEMS

The descriptions and coordinates provided were sometimes inadequate to find the sites. Numerous attempts were needed to locate some of these points.

5.59' NGVD29 (Deep)
5.77' (NGVD29) Shallow
Written at the well

WELL ELEVATIONS

Designation	Latitude	Longitude	Northing[1] (Y)	Easting[1] (X)	Casing Elev 88[2]	Casing Elev 29[2]	Ground Elev 88[3]	Ground Elev 29[3]
BBC~~WM~~W1A	25° 40' 35.0"	80° 19' 23.7"	488,652	879,056	3.91'	5.43'	4.1'	5.6'
BBC~~WM~~W2A	25° 30' 15.0"	80° 20' 51.4"	426,012	871,342	0.94'	2.46'	0.7'	2.2
GW2 **BBC~~WM~~W3~~A~~**	25° 29' 06.9"	80° 22' 46.5"	419,086	860,821	5.60'	7.12'	2.6'	4.1'
GW1 **BBC~~WM~~W3~~B~~**	25° 29' 06.9"	80° 22' 46.5"	419,086	860,825	5.56'	7.08'	2.6'	4.1'
BBC~~WM~~W4A	25° 27' 20.5"	80° 22' 02.7"	408,359	864,892	3.29'	4.82'	1.3'	2.8'
BBC~~WM~~W5A	25° 26' 26.7"	80° 22' 46.7"	402,910	860,886	4.92'	6.45'	1.3'	2.8'
BBC~~WM~~W6A	25° 25' 47.4"	80° 26' 01.0"	398,870	843,088	3.71'	5.24'	1.4'	2.9'
BBC~~WM~~W6B	25° 25' 47.5"	80° 26' 00.9"	398,871	843,098	3.85'	5.38'	1.5'	3.1'
GW2 **BBC~~WM~~W7A**	25° 36' 05.4"	80° 18' 34.2"	461,451	883,721	4.34'	5.86'	4.6'	6.1'
GW1 **BBC~~WM~~W7B**	25° 36' 05.4"	80° 18' 34.2"	461,458	883,727	4.41'	5.93'	4.6'	6.1'
BBC~~WM~~W8A	25° 36' 04.4"	80° 18' 20.8"	461,356	884,953	6.26'	7.79'	-5.1	-3.5'
BBC~~WM~~W8B	25° 36' 04.5"	80° 18' 20.8"	461,364	884,955	6.04'	7.57'	-5.1	-3.5'
BBC~~WM~~W9A	25° 28' 21.2"	80° 20' 48.7"	414,526	871,638	2.35'	3.87'	2.5'	4.0'
BBC~~WM~~W9B	25° 28' 21.1"	80° 20' 48.7"	414,518	871,638	2.31	3.83'	2.5'	4.0'
BBC~~WM~~W10A	25° 28' 19.7"	80° 19' 55.6"	414,393	876,509	7.25'	9.12'	N/A	N/A
BBC~~WM~~W10B	25° 28' 19.8"	80° 19' 55.6"	414,402	876,511	6.40'	8.27'	N/A	N/A

[1] State Plane Coordinate System, Florida East Zone, North American Datum of 1983.
[2] North American Vertical Datum of 1988 (NAVD 88).
[3] National Geodetic Vertical datum of 1929 (NGVD 29).

GPS Reports not available for
Well BBCW8A & B and
Well BBCW10A & B

Values maybe reversed
field book does not
match adjustment sheet
Note these values do not
match what's being used
at the site
3.95 (29) Deep
3.92 (29) Shallow

QA/QC

The project's progress was closely monitored throughout the period of work.

PROJECT DELIVERABLES

As specified and in consideration of the project's Statement of Work issued, the following items were generated by WSM as deliverables (in hardcopy and digital format on CD-ROM) to the District: (1) This Surveyor's Report (in PDF also) (2) Computation file with vertical extracts; (3) Copy of Field Book in digital form (in PDF); (4) Metadata file using Corpsmet95.

CERTIFICATION

(1) This survey meets all applicable requirements of the Florida Minimum Technical Standards as contained in Chapter 61G17-6 FAC. (2) This report is not valid without the signature and the original raised seal of the Florida Surveyor and Mapper in responsible charge. (3) Additions or deletions to this data by anyone other than the signing party are prohibited without written consent of the signing party.

Surveyor and Mapper in Responsible Charge:
Jorge Fernandez, II
Florida Professional Land Surveyor
License No. 5103

For the Firm of:
Weidener Surveying & Mapping, P.A. (LB 4207)
10418 NW 31 Terrace
Miami, Florida 33172

Signed:_____ SEAL

Date:_____

BBCW1

BBCWMW1A

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well

	A	B	C	D
1				
2				
3	**Registration Information - BBCW1 Deactivation**			
4		Today's Date	**12/13/2010**	
5		Site Name:	**BBCW1**	
6		Activity	**Deactivation**	
7		Effective Date:	**12/13/2010**	
8		Start Date of data (if different from effective date):		
9	**Customer**			
10		Name:	**Matthew Morrison**	
11		Business Area (Division):	**7630**	
12		Agency:	**760**	
13		Internal Order	**P12827001410**	
14		Fund	**410000**	
15		Legal Mandate:	**No Known Mandate**	
16	**Project Manager:**			
17		Name:	**Lee Hennick**	
18		Division:	**5726**	
19		Agency:	**570**	
20		Project Name:		
21		Contract #:		
22				
23		Common Name	**BBCW1 - Biscayne Bay Well Monitoring**	36
24		PM Notes:	**From: Shaffer, John** **Sent: Thursday, September 30, 2010 10:41 AM** **To: Krupa, Steven; Kwiatkowski, Peter; Janzen, John; Merkal, Maura; Ritchie, Garnett; Hunt, Melody** **Cc: Rudnick, David; Gonzalez, Eric; Burns, Scott; Wright, Michael; Rawlik, Peter; Morrison, Matthew; Verrastro, Robert** **Subject: So Dade Monitoring Well Support for FY 2011**	1627
25				
26		Recorder Location/Purpose:	**Stand-Alone Recorder (Non-Flow Site)**	
27		Type of Recorder:	**CR-10**	
28		Array ID Configuration Table attached	**NO**	
29		If water control structure, select:		
30	**Travel & Access**			
31		Transportation		
32		Lock Type		
33		Combination		
34		Directions		0
35		Address		
36	**Survey Information**			
37		Benchmark Elevation		
38		Date		
39		Stamp		
40		Agency		
41		Type		
42		Benchmark Datum		
43		Benchmark Location/Description		0
44	**Communications Information**			
45		Communication System	**Loggernet**	
46		Communication Type	**R.F. (V.H.F. Radio)**	
47		R.F. Code / Modem Address	**65**	
48		Phone Number		
49		Tower	**HMST-T**	
50		R.F. Access Point		
51		RTU Address		
52		Loggernet Server	**LOG4**	
53		IP Address	**141.232.41.37**	
54		Gateway1		
55		Gateway2		
56		Gateway3		
57		Gateway4		


BBC W 1
REF ELEV. 7.52 FT
NAVD 29
B-Line Systems, Inc.
TYPE 4X
UNDERWRITERS LABORATORIES INC
LISTED
INDUSTRIAL CONTROL PANEL ENCLOSURE
ISSUE NO. A-1128
FOR USE WITH U/L LISTED HUBS ONLY
70604 A
INDUSTRIAL CONTROL EQUIPMENT ENCLOSURE
C.S.A. ENCLOSURE TYPE 4X
LR 78446
B-Line Systems, Inc.
SERIES NO. AW
TO MEET C.S.A. AND U.L. GROUNDING REQUIREMENTS USE GROUNDING KIT CIRCLE AW CATALOG NO.: GLK2
ENCLOSURE OPENINGS ARE TO BE FILLED BY EQUIPMENT MARKED FOR USE IN THE SAME ENVIRONMENT TYPE AS THE ENCLOSURE.

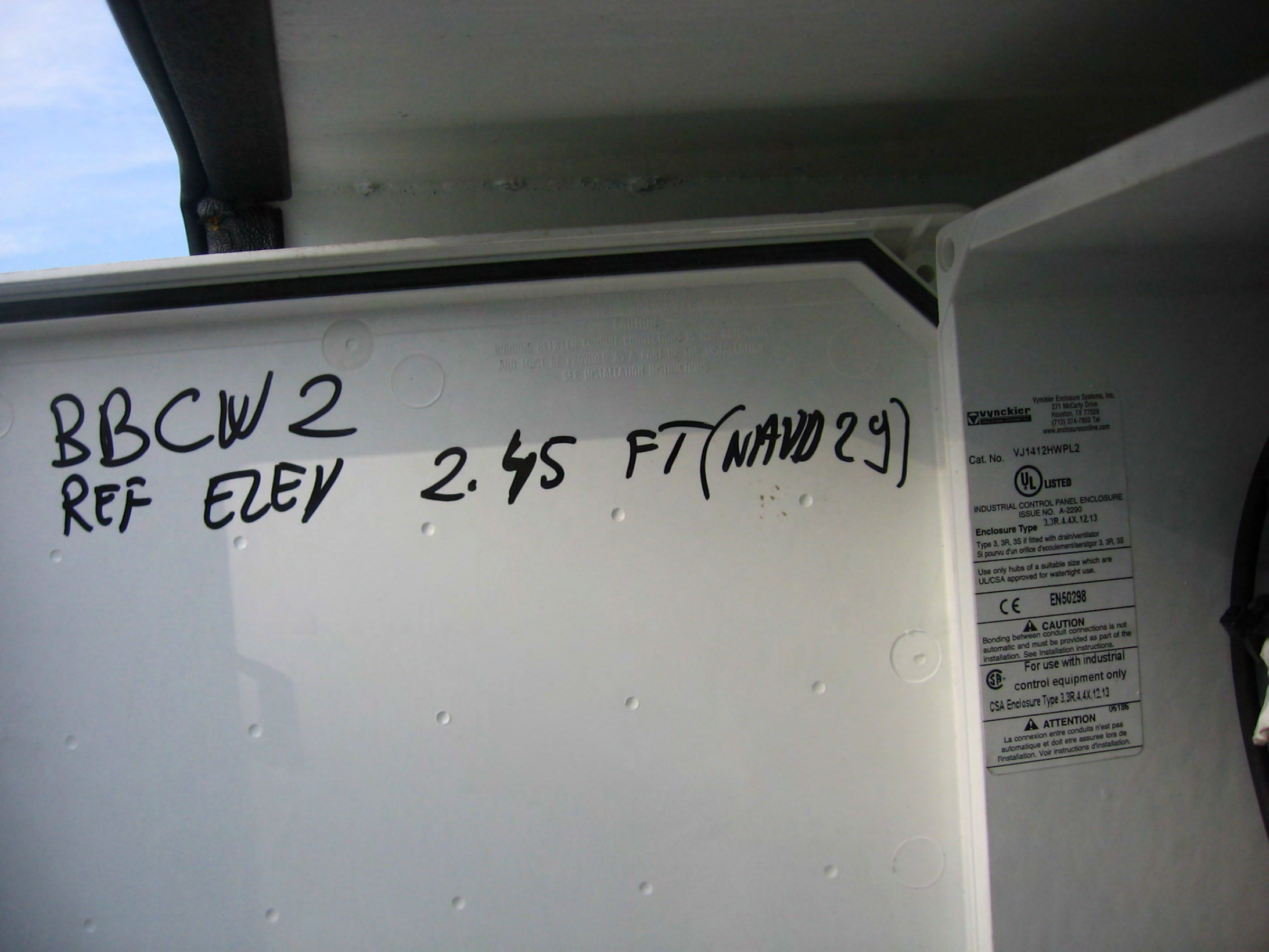

MONITOR
WELL


7.32 FT

BBCW2

~~BBCWMW2A~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well


BBCW 2
REF ELEV 2.45 FT (NAVD 29)
CAUTION
BONDING BETWEEN CONDUIT CONNECTIONS IS NOT AUTOMATIC
AND MUST BE PROVIDED AS A PART OF THE INSTALLATION
SEE INSTALLATION INSTRUCTIONS
vynckier
Vynckier Enclosure Systems, Inc.
271 McCarty Drive
Houston, TX 77029
(713) 374-7850 Tel
www.enclosuresonline.com
Cat. No. VJ1412HWPL2
LISTED
INDUSTRIAL CONTROL PANEL ENCLOSURE
ISSUE NO. A-2290
Enclosure Type 3,3R,4,4X,12,13
Type 3, 3R, 3S if fitted with drain/ventilator
Si pourvu d'un orifice d'ecoulement/aeratigor 3, 3R, 3S
Use only hubs of a suitable size which are UL/CSA approved for watertight use.
CE EN50298
CAUTION
Bonding between conduit connections is not automatic and must be provided as part of the installation. See installation instructions.
For use with industrial control equipment only
CSA Enclosure Type 3,3R,4,4X,12,13
06186
ATTENTION
La connexion entre conduits n'est pas automatique et doit etre assuree lors de l'installation. Voir instructions d'installation.


ELEV. 2.45 FT

BBCW3 GW2

~~BBCWMW3A~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well


SHALLOW
WELL #1


7.08
SHALLOW
GW1

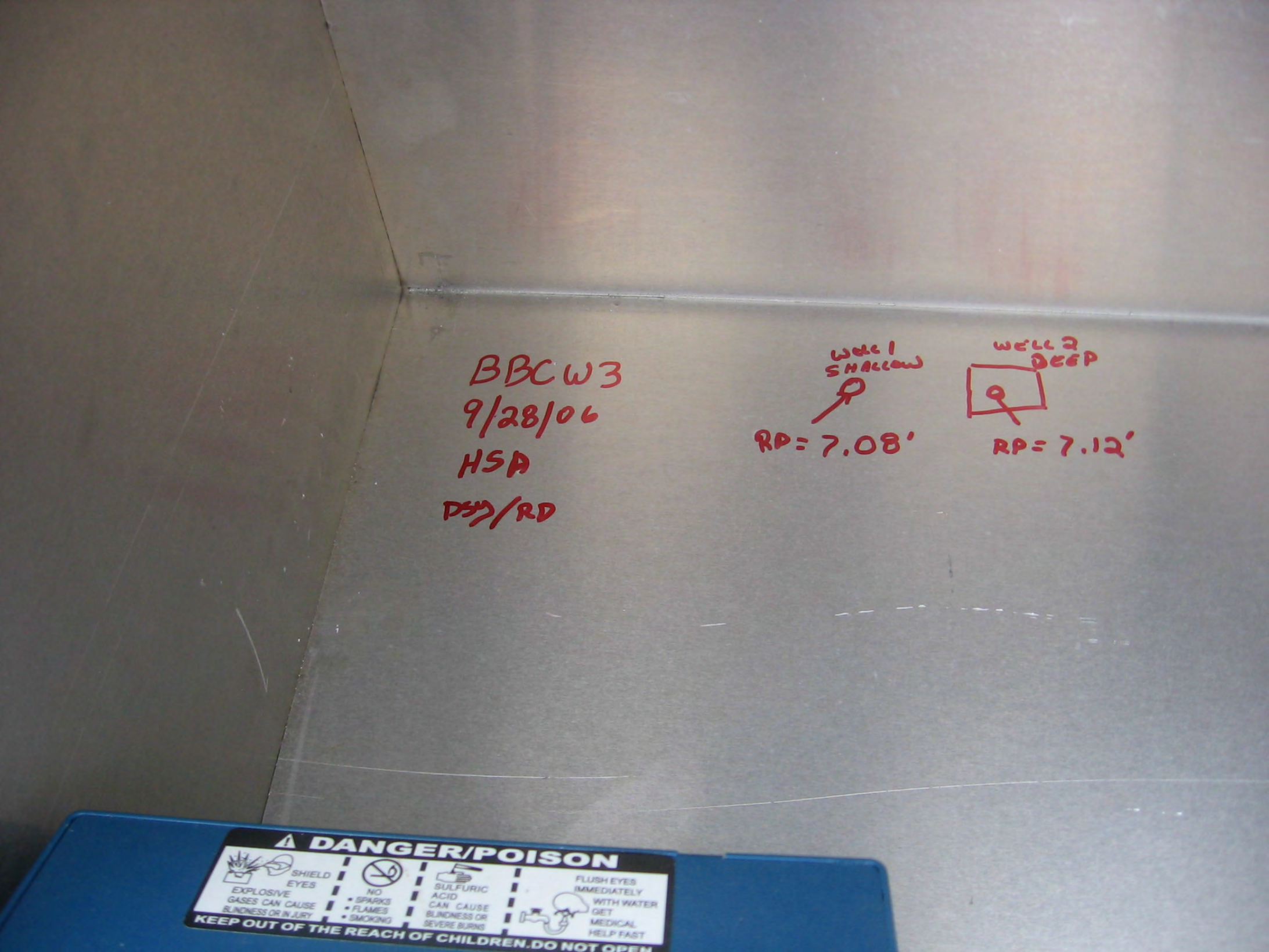

Sealed Rechargeable
Battery
POWERSONIC
MODEL PS-12400
12 Volt 40.0 Amp

MODEL PS-12400 NB
12 Volt 40.0 Amp. Hr.

Power-Sonic Corporation
www.power-sonic.com

DEEP GW2


DEEP GW2 7.12


BBCW3
9/28/06
HSA
DSJ/RD
WELL 1 SHALLOW
RP= 7.08'
WELL 2 DEEP
RP= 7.12'
DANGER/POISON
SHIELD EYES
EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY
NO • SPARKS • FLAMES • SMOKING
SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS
FLUSH EYES IMMEDIATELY WITH WATER GET MEDICAL HELP FAST
KEEP OUT OF THE REACH OF CHILDREN. DO NOT OPEN

BBCW3 GW1

~~**BBCWMW3B**~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well

~~BBCWMW4A~~

BBCW4

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well

REGISTRATION WORKSHEET - BBCW4 Inactivation

Site Name: **BBCW4** Today's Date: **3/5/2015** Type Recorder: **CR-10**

Activity: **Inactivation** Effective Date: **3/4/2015** Start Date of Data :

Customer: **Garnett Ritchie** Division: **5833** Agency: **580** Proj Activity Code:

Project Manager: **Lee Hennick** Division: **5839** Agency: **580** Contract #:
Project Fund
Internal Order

Project name: **BBCW MONITORING WELL SIT** Legal Mandate:

Short Common Name / Description:	BBBCW4 Biscayne Bay Well Monitoring

Proj. Mgr. Notes:	Inactivate BBCW4. Site no longer required. CRQ000000007638 From: Lindstrom, Linda

Site Directions:	

Site Address (if any):	

Transportation: Lock type or combination: #

Recorder Location/Purpose: **Stand-Alone Recorder (Non-Flow Site)** Structure Type:

Array ID Configuration table attached **YES**

SURVEY INFORMATION

B.M. Elevation: Date: Stamp:

Agency: Type: Datum:

Benchmark Location/ Description	

COMMUNICATIONS INFORMATION

Communications System: Loggernet Server: Loggernet IP Address:

Tower: Communication Type: R.F. Code/Modem Address: R.F. Access Point:

Phone Number:

RTU Address: Gateways:

WELL INFORMATION

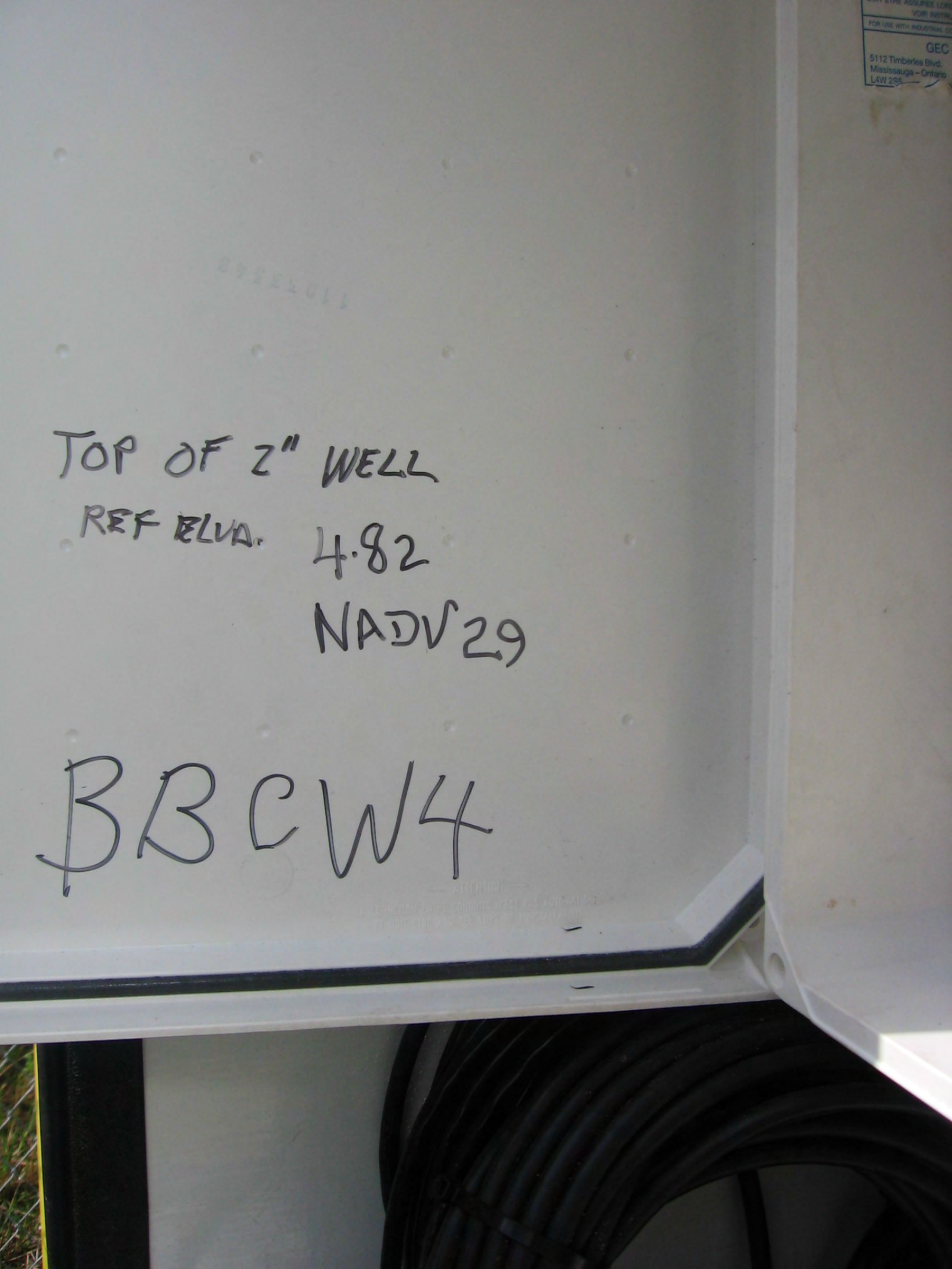
Sensor	Customer Ref	Ref Elev	Elev Date	Top of Well	Bottom of Well	Ground/ Land Elev	Depth of Well	Lat	Long	X-Coord	Y-Coord	Sec	Twn	Rng	Qu	Basin	Cty
GW1	BBCW4	4.82	8/16/2005	4.82	-31.98	2.8	36.8	25 27 20.513	-80 22 2.683	864890.621971	408363.934116	19	57	40	1203	NORTH CANAL	Miami-Dade

Sensor	Reference Elevation Location	Ground Water Sensor Location
GW1	ATOP OF 2" PLASTIC COOLAR THAT HOLDS THE SS RING	LOCATED @ ELEVEATION OF -5.15 FT (9.97 FT BELOW MEASURING POINT)

ADDITIONAL GIS INFORMATION

Item/Parameter	Description/Notes	Lat	Long	X-Coord	Y-Coord	Sec	Twn	Rng	Qu	Basin	Cty
CR-10		25 27 20.520	-80 22 2.594	864897.067260	408364.911557	19	57	40	1203	NORTH CANAL	Miami-Dade


YOKOGAWA


TOP OF 2" WELL
REF ELVA. 4.82
NADV 29
BBCW4

BBCW5

~~BBCWMW5A~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well

REGISTRATION WORKSHEET - BBCW5 Inactivation

Site Name: **BBCW5** Today's Date: **4/7/2015** Type Recorder: **CR-10**

Activity: **Inactivation** Effective Date: **2/27/2015** Start Date of Data :

Customer: **Garnett Ritchie** Division: **5833** Agency: **580** Proj Activity Code:

Project Manager: **Lee Hennick** Division: **5839** Agency: **580** Contract #:
Project Fund
Internal Order

Project name: **BBCW MONITORING WELL SIT** Legal Mandate:

Short Common Name / Description:	BBCW5 Biscayne Bay Well Monitoring

Proj. Mgr. Notes:	Site vandalized with stolen equipment. Unable to reactivate site without increased protection for sites equipment. SM is working with District Security on possible methods of added protection. No estimated completion date at this time.

Site Directions:	

Site Address (if any):	

Transportation: **Std Vehicle** Lock type or combination: **Combination Lock number** # **6745**

Recorder Location/Purpose: **Stand-Alone Recorder (Non-Flow Site)** Structure Type:

Array ID Configuration table attached **YES**

SURVEY INFORMATION

B.M. Elevation: Date: Stamp:

Agency: Type: Datum:

Benchmark Location/ Description	

COMMUNICATIONS INFORMATION

Communications System: **Loggernet** Loggernet Server: **LOG2** Loggernet IP Address: **141.232.41.20**

Tower: **HMST-T** Communication Type: **R.F. (V.H.F. Radio)** R.F. Code/Modem Address: **69** R.F. Access Point:

Phone Number:

RTU Address: Gateways:

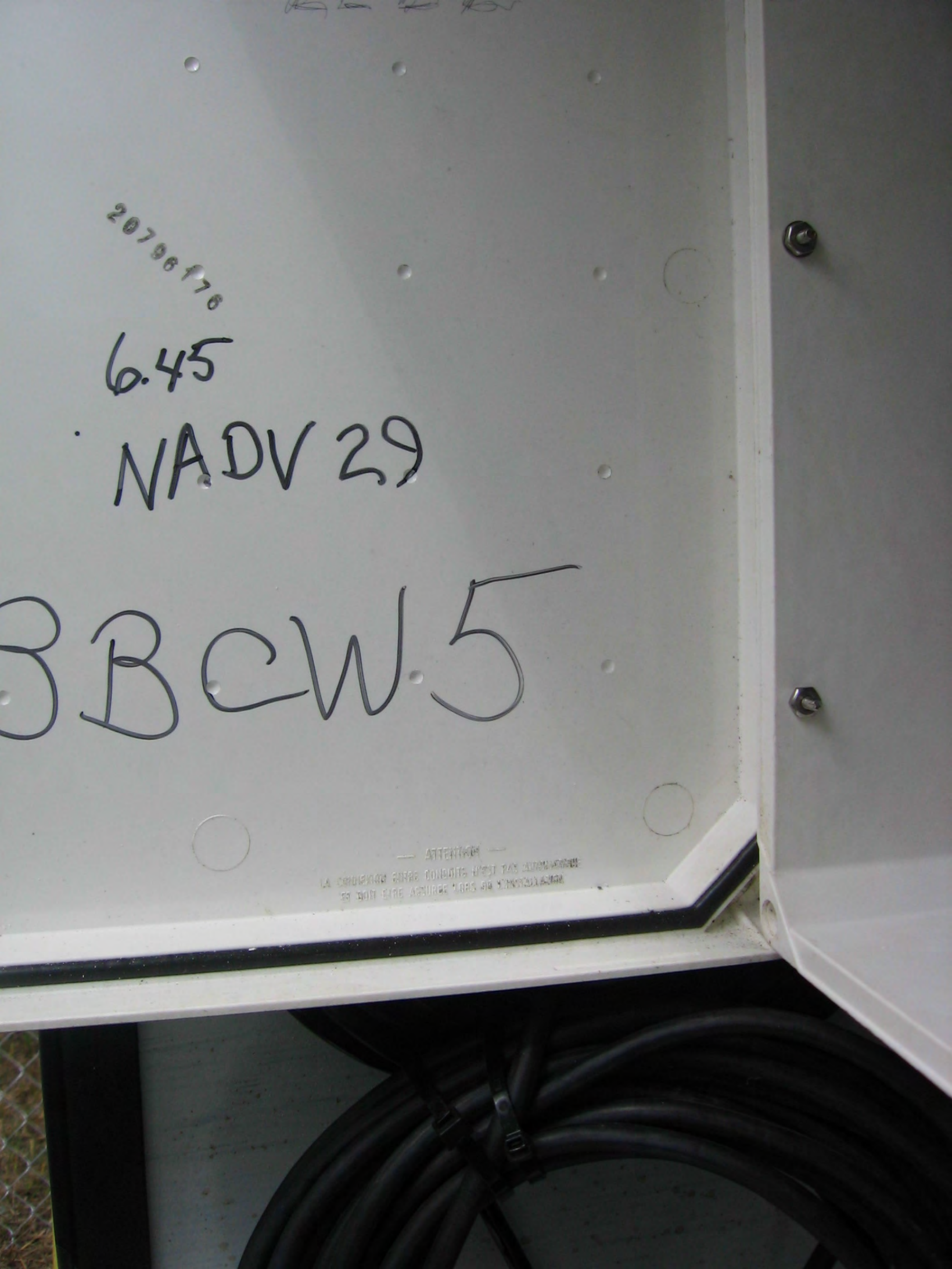
WELL INFORMATION

Sensor	Customer Ref	Ref Elev	Elev Date	Top of Well	Bottom of Well	Ground/ Land Elev	Depth of Well	Lat	Long	X-Coord	Y-Coord	Sec	Twn	Rng	Qu	Basin	Cty
GW1	BBCW4	4.82	8/16/2005	4.82	-31.98	2.8	36.8	25 27 20.513	-80 22 2.683	864890.621971	408363.934116	19	57	40	1203	NORTH CANAL	Miami-Dade

Sensor	Reference Elevation Location	Ground Water Sensor Location
GW1	ATOP OF 2" PLASTIC COOLAR THAT HOLDS THE SS RING	LOCATED @ ELEVEATION OF -5.15 FT (9.97 FT BELOW MEASURING POINT)

ADDITIONAL GIS INFORMATION

Item/Parameter	Description/Notes	Lat	Long	X-Coord	Y-Coord	Sec	Twn	Rng	Qu	Basin	Cty
CR-10		25 27 20.520	-80 22 2.594	864897.067260	408364.911557	19	57	40	1203	NORTH CANAL	Miami-Dade


20706176
6.45
NADV 29
3BCW5

~~BBCWMW6A~~ BBCW6

Weidener Surveying & Mapping, P.A.
Date of Photo: August 25, 2005
View: Geotechnical Well

BBCW6

~~BBCWMW6B~~

Weidener Surveying & Mapping, P.A.
Date of Photo: August 25, 2005
View: Geotechnical Well


BBCW6
ICRD
NAVD 29
DEEP
5.59'
SHALLOW
5.77'
BBCW6


BBCW6
#2
DEEP
5.59'
#1
SHALLOW
5.724
NAVD 29
Sealed Rechargeable
Battery
POWERSONIC
MODEL PS-12400 NB
12 Volt 40.0Amp.Hr.

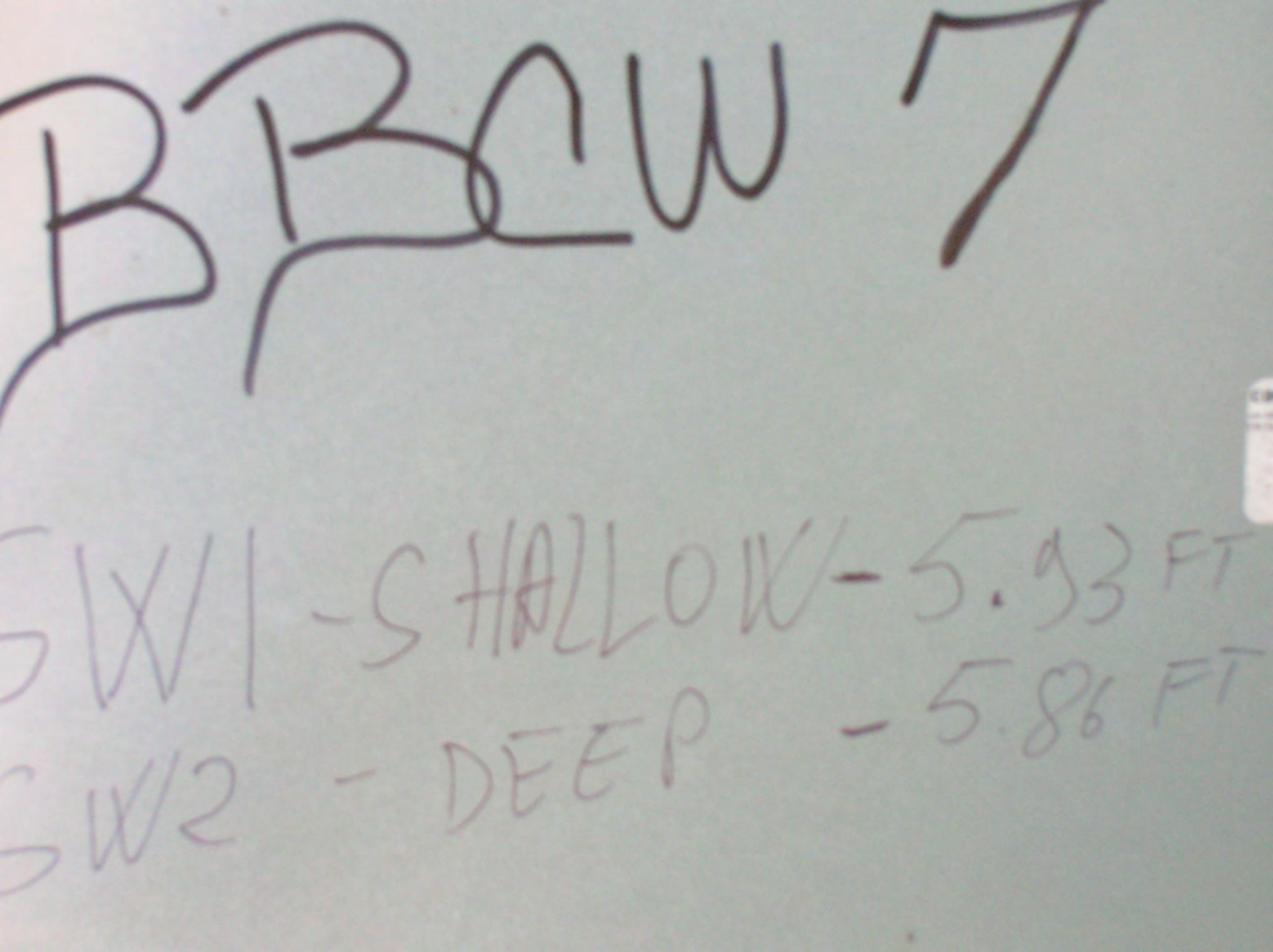
BBCW7 GW1

~~BBCWMW7B~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Well

~~BBCWMW7A~~ BBCW7 GW2

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well


BROW 7
SW1 - SHALLOW - 5.93 FT
SW2 - DEEP - 5.86 FT


MORRISON

	A	B	C	D
1				
2				
3	**Registration Information - BBCW7 Deactivation**			
4		Today's Date	**12/13/2010**	
5		Site Name:	**BBCW7**	
6		Activity	**Deactivation**	
7		Effective Date:	**12/9/2010**	
8		Start Date of data (if different from effective date):		
9	**Customer**			
10		Name:	**Matthew Morrison**	
11		Business Area (Division):	**7630**	
12		Agency:	**760**	
13		Internal Order	**P12827001410**	
14		Fund	**410000**	
15		Legal Mandate:	**Comp Everglades Restoration Plan**	
16	**Project Manager:**			
17		Name:	**Lee Hennick**	
18		Division:	**5726**	
19		Agency:	**570**	
20		Project Name:		
21		Contract #:		
22				
23		Common Name	**BBCW7 - Biscayne Bay Well Monitoring**	36
24		PM Notes:	**From: Shaffer, John** **Sent: Thursday, September 30, 2010 10:41 AM** **To: Krupa, Steven; Kwiatkowski, Peter; Janzen, John; Merkal, Maura; Ritchie, Garnett; Hunt, Melody** **Cc: Rudnick, David; Gonzalez, Eric; Burns, Scott; Wright, Michael; Rawlik, Peter; Morrison, Matthew; Verrastro, Robert** **Subject: So Dade Monitoring Well Support for FY 2011**	1627
25				
26		Recorder Location/Purpose:	**Stand-Alone Recorder (Non-Flow Site)**	
27		Type of Recorder:	**CR-10**	
28		Array ID Configuration Table attached	**NO**	
29		If water control structure, select:		
30	**Travel & Access**			
31		Transportation		
32		Lock Type		
33		Combination		
34		Directions		0
35		Address		
36	**Survey Information**			
37		Benchmark Elevation		
38		Date		
39		Stamp		
40		Agency		
41		Type		
42		Benchmark Datum		
43		Benchmark Location/Description		0
44	**Communications Information**			
45		Communication System	**Loggernet**	
46		Communication Type	**R.F. (V.H.F. Radio)**	
47		R.F. Code / Modem Address	**71**	
48		Phone Number		
49		Tower	**HMST-T**	
50		R.F. Access Point		
51		RTU Address		
52		Loggernet Server	**LOG4**	
53		IP Address	**141.232.41.37**	
54		Gateway1		
55		Gateway2		
56		Gateway3		
57		Gateway4		

BBCWMW8A & BBCWMW8B

South Florida Water Management District supplied
Date of Photo: August 1, 2005
View: Geotechnical Well

BBCWMW8A & BBCWMW8B

South Florida Water Management District supplied
Date of Photo: August 1, 2005
View: Geotechnical Well

BBCW9

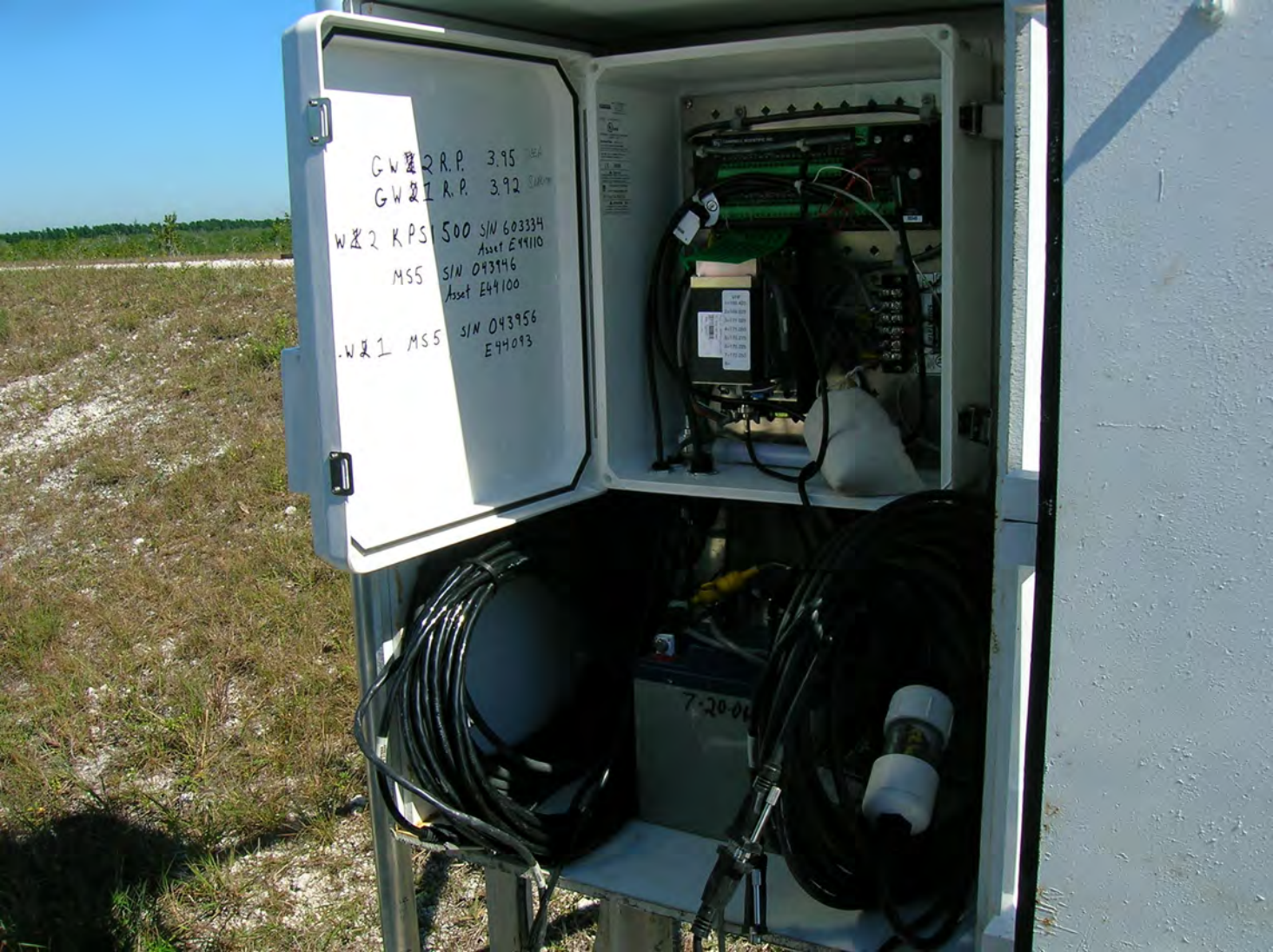
~~BBCWMW9A~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well

BBCW9

~~BBCWMW9B~~

Weidener Surveying & Mapping, P.A.
Date of Photo: July 21, 2005
View: Geotechnical Well


GW2R R.P. 3.95
GW21 R.P. 3.92
W22 KPSI 500 S/N 603334
Asset E44110
MSS S/N 043946
Asset E44100
.W21 MSS S/N 043956
E44093
7-20-04


MW-1 SHALLOW
ELEV 3.58 FT
MORRISON


GW1 SHALLOW
ELEV 3.32 FT


Master

GW2 DEEP

ELEV 3.95

BBCWMW10A & BBCWMW10B

South Florida Water Management District supplied
Date of Photo: August 1, 2005
View: Geotechnical Well

[redacted]

[redacted]

[redacted]

DAVID F
TRACY B
TODD L

7-15-05

LEVEL RUN TO BBCWMW58

M631-3
TASK 9

SEG = 1834 B

4.9 NAVD88 VERTCON

STA	+	⊼	−	ELEV	
BM				4.900	H-111
	4.932	9.832			
			4.026		
B-TP-1				5.806 ✓	
	4.043	9.849			
			3.870		
B-TP-2				5.979 ✓	
	3.877	9.856			
			3.897		
B-TP-3				5.959 ✓	
	4.157	10.116			
			3.965		
B-TP-4				6.151 ✓	
	4.190	10.341			
			4.343		
B-TP-5				5.998 ✓	
	4.297	10.295			
			3.095		
BM.				7.20	V.314
			4.164		
B-TP-6				6.131	

NOTE: TURNING PTS 1-20 & 33-47 ARE PK NAILS IN N. E/P OF SW 344 ST OPP. THE PP's THAT ARE ON THE S. SIDE OF SW 344 ST. BETWEEN SW 137 AVE & SW 117 AVE USED THE SAME NAILS FOR. TPS 1-20 & 33-47 (SEE Pgs 7-10)

TURNING POINTS 21-26 & 27-32 ARE SHOT ON THE SAME NAILS. (SEE Pgs 6-8) TPs ARE ON ROCK RD SW 117 AVE S. OF SW 344ST AND ARE 60-D SPIKES

SAMPLE
TRIMBLE
TOPO D

7-6-05

LEVEL RUN TO BBC WMW 5A

M681-4
TASK 9

SEG 1834 B

STA	+	π	−	ELEV	DESC
B-TP-6				6.131	
	3.774	9.905			
			3.749		
B-TP-7				6.156 ✓	
	3.349	10.005			
			4.187		
B-TP-8				5.818 ✓	
	3.647	9.465			
			4.255		
B-TP-9				5.210 ✓	
	4.186	9.396			
			4.020		
B-TP-10				5.376 ✓	
	3.996	9.372			
			3.964		
B-TP-11				5.408 ✓	
	3.533	8.996			
			3.491		
B-TP-12				5.505 ✓	
	3.538	9.043			
			3.727		
B-TP-13				5.316 ✓	

DAVID ?
TRACY ?
TODD ?

7-15-05

LEVEL RUN TO BBCWMW5A

M631-5
TASK-9

SEG 1834 B

STA	+	π	-	ELEV	DESC
B-TP-13				5.316	
	3.334	9.150			
			3.764		
B-TP-14				5.386 ✓	
	3.797	9.183			
			3.919		
B-TP-15				5.264 ✓	
	3.931	9.245			
			3.931		
B-TP-16				5.314 ✓	
	3.685	8.999			
			4.002		
B-TP-17				4.997 ✓	
	3.946	8.943			
			4.031		
B-TP-13				4.812 ✓	
	4.135	8.947			
			3.824		
B-TP-19				5.123 ✓	
	3.991	9.114			
			4.042		
B-TP-20				5.072 ✓	

DAVID F
TRACY B
TODD D

7-15-05

LEVEL RUN TO BBCW/MW 5A

MG81-6
TASK 9

SEG 1834 B

STA	+	π	−	ELEV	DESC
B-TP-20				5.072	
	4.206	9.278			
			7.267		
B-TP-21				2.011 ✓	
	5.388	7.399			
			4.565		
B-TP-22				2.834 ✓	
	4.54	7.374			
			3.983		
B-TP-23				3.391 ✓	
	4.264	7.655			
			4.533		
B-TP-24				3.122 ✓	
	4.446	7.568			
			5.536		
B-TP-25				2.032 ✓	
	4.954	6.986			
			4.726		
B-TP-26				2.260 ✓	

DATE F 7-15-05
TODD B
TRAM B

LEVEL RUN TO BBCWMW5A

M681-7
TASK 9

SEG 1834 B

STA	+	↑	-	ELEV	DESC
B-TP-26				2.260	
	5.533	7.793			
			1.506		
BBCWMW5A				6.292	N. SIDE OF TOP OF 0.50" PVC OUTER CASING OF MONITORING WELL
	1.746	8.038			
			2.136		
BBCWMW5A				5.902	N. SIDE OF TOP OF 2" PVC MONITORING WELL INSIDE OF OUTER CASING
	1.964	7.866			
			5.604		
B-TP-27				2.262 ✓	(B-TP-26) 0.002 HIGH
	4.920	7.182			
			5.152		
B-TP-28				2.030 ✓	(B-TP-25) 0.002 LOW
	5.733	7.763			
			4.644		
B-TP-29				3.119 ✓	(B-TP-24) 0.003 LOW
	4.823	7.942			
			4.556		
B-TP-30				3.386 ✓	(B-TP-23) 0.005 LOW
	4.390	7.776			
			4.944		
B-TP-31				2.832 ✓	(B-TP-22) 0.002 LOW

4.92' NAVD88 on Well Elevation Chart

DAVID F
TRACY E
TODD L

7-15-05

LEVEL RUN TO BCCWMW5A

MG81-8
TASK 9

SEG-1834-B

ST#	+	∓	−	ELEV	DESC
B-TP-31				2.832	
	4.878	7.710			
			5.705		
B-TP-32				2.005 ✓	(B-TP-21) 0.006 LOW
	7.247	9.252			
			4.181		
B-TP-33				5.071 ✓	(B-TP-20) 0.001 LOW
	4.663	9.739			
			4.617		
B-TP-34				5.122 ✓	(B-TP-19) 0.001 LOW
	4.335	9.457			
			4.651		
B-TP-35				4.806 ✓	(B-TP-18) 0.006 LOW
	4.332	9.633			
			4.704		
B-TP-36				4.984 ✓	(B-TP-17) 0.013 LOW
	4.682	9.666			
			4.369		
B-TP-37				5.297 ✓	(B-TP-16) 0.017 LOW
	4.418	9.715			
			4.473		
B-TP-38				5.242 ✓	(B-TP-15) 0.022 LOW

DAVID F
TRACY E
TODD P

7-15-05

LEVEL RUN TO BCCWMW5A

M6B1-9
TASK 9

SEG-1834-B

STA	+	⊼	−	ELEV	DESC	
B-TP-38				5.242		
	4.648	9.890				
			4.524			
B-TP-39				5.366 ✓		(B-TP-14) 0.002 LOW
	4.429	9.795				
			4.495			
B-TP-40				5.300 ✓		(B-TP-13) 0.016 LOW
	4.563	9.863				
			4.376			
B-TP-41				5.487 ✓		(B-TP-12) 0.018 LOW
	4.302	9.789				
			4.410			
B-TP-42				5.379 ✓		(B-TP-11) 0.029 LOW
	4.486	9.865				
			4.519			
B-TP-43				5.346 ✓		(B-TP-10) 0.030 LOW
	4.510	9.856				
			4.679			
B-TP-44				5.177 ✓		(B-TP-9) 0.033 LOW
	4.910	10.087				
			4.304			
B-TP 45				5.783 ✓		(B-TP-8) 0.035 LOW

PARTY F
TRACY B
TODD S

7-15-05

LEVEL RUN TO BBC WMWSA

M631-13
TASK 9

SEG-1834-B

STA	+	↑	−	ELEV	DESC
B-TP-45				5.783	
	4.851	10.634			
			4.518		
B-TP-46				6.116✓	(B-TP-7) 0.040 LOW
	4.462	10.578			
			4.489		
B-TP-47				6.089✓	(B-TP-6) 0.042 LOW
	4.223	10.312			
			3.154		
BM				7.158✓	V314 0.012 LOW

NGS V314 (AC1165)
6.1745283333' (1.882m) NAVD88
7.703396666' (2.348m) NGVD29

7-13-05

LEVEL RUN TO BBCWMW1A

SEG: 1334-D

M681-11
TASK 5

STA	+	↑	−	ELEV	DESC	
GA[illegible]-1				100'	RANDOM	PT FOR PEG TEST
	5.873	105.378				
			6.122			
NAIL-2				99.256	RANDOM	PT FOR PEG TEST
	6.231	105.487				
			5.490			
NAIL-1				99.997	CLOSE	0.003 LOW

PEG TEST

BM				3.668	TP # 35	FROM GAIL HALLS LEVEL RUN DOWN SW ST AVE (SEE FB M 332)
	7.234	10.952				
			5.335			
TP-1				5.617	NL	
	5.032	10.649				
			4.981			
TP-2				5.668	NL	
	4.180	9.848				
			5.053			
TP-3				4.795	NL	
	5.537	10.332				
			5.404			
TP-4				4.928	NL	

DAVID F
JOSEPH
NICK L

7-18-05

LEVEL RUN TO BBCWMM 1A

SEG = 1334-D

M681-12
TASK 5

STA	+	H	-	ELEV	DESC
TP-4				4.928	
	5.311	10.239			
			4.986		
TP-5				5.253	NL
	6.432	11.685			
			5.598		
TP-6				6.087	NL
	5.675	11.762			
			5.657		
TP-7				6.105	NL
	3.845	9.950			
			6.315		
TP-8				3.635	NL
	4.532	8.167			
			5.074		
TP-9				3.093	NL
	3.825	6.918			
			3.856		
TP-10				3.062	NL
	4.465	7.527			
			3.977		
TP-11				3.551	NL

DAVID F
JOSE H
NICK L

7-18-05

LEVEL RUN TO BBCWMWIA

SEG=1834-D

MGBM3
TASK 5

STA	+	HI	-	ELEV	DESC	
TP-11				3.551		
	5.321	8.872				
			5.305			
TP-12				3.567	NL	ADJ TO BBCWMWIA
	5.519	9.086				
			5.534			
TP-13				3.552	NL	(TP-11) 0.001 HIGH
	4.148	7.700				
			4.636			
TP-14				3.064	NL	(TP-10) 0.002 HIGH
	3.799	6.863				
			3.767			
TP-15				3.096	NL	(TP-9) 0.003 HIGH
	5.035	8.131				
			4.492			
TP-16				3.639	NL	(TP-8) 0.009 HIGH
	6.716	10.335				
			4.249			
✓ TP-17				6.100	NL	(TP-7) 0.001 HIGH
	5.249	11.335				
			5.267			
TP-18				6.088	NL	(TP-6) 0.001 HIGH

DAVIS &
JOSEPH
NICOLL

7-18-05

LEVEL RUN TO BBC WMW 1A

SEG: 1834-D

M681-14
TASK-5

STA	+	π	−	ELEV	DESC	
TP-18				6.088		
	5.536	11.124				
			5.870			
TP-19				5.254	NL	(TP-5) 0.001 HIGH
	4.873	10.127				
			5.197			
TP-20				4.930	NL	(TP-4) 0.002 HIGH
	5.086	10.016				
			5.218			
TP-21				4.798	NL	(TP-3) 0.003 HIGH
	4.860	9.658				
			3.985			
TP-22				5.673	NL	(TP-2) 0.005 HIGH
	4.437	10.110				
			4.489			
TP-23				5.621	NL	(TP-1) 0.004 HIGH
	5.898	11.519				
			6.246			
BM				5.273	NL	TP-34 FROM SAM HALLS LEVEL RUN DOWN SW 87 AVE (SEE FB M-682)

DAVID =
CHRIS C
NICK L

7-18-03

ELEV. ON BBCWMW 1-A

SEG-1334-D

M681-15
TASK 5

ST.#	+	↗	-	ELEV	DESC		
TP-12				3.567			
	4.736	8.303					
			4.210				
				4.093	N. RIM	OUTER CASING OF BBCWMW 1-A	4.093
BBCWMW1-A							
BBCW1			4.391				
BBCWMW1-A				3.912	N. SIDE	OF TOP OF 2" PVC WELL	3.917
	4.413	8.325					
			4.759				
TP-12				3.566	0.001	LOW	

DAVID F
CHRIS C
NICK L

7-13-05

LEVEL RUN TO BBC WMW 7A & 9A

SEG 1834 M

M631-16
TASK-5

STA	+	↑	−	ELEV.	DESC.
BM				11.307	TP-1
	4.248	15.555			
			7.842		
TP#1				7.713	NL
	2.636	10.399			
			5.419		
TP-2				4.980	NL
	4.782	9.762			
			4.699		
TP-3				5.063	NL
	4.988	10.051			
			4.673		
TP-4				5.378	NL
	3.859	9.237			
			4.824		
TP#5				4.413	NL
	4.728	9.141			
			4.965		
TP-6				4.176	NL

FROM SAM HALES LEVEL RUN DOWN OLD CUTLER RD (SEE FB M682)

DAVID F
CHRIS S
NICK L

7-19-05

LEVEL RUN TO BBCWMW 7-A & 7-B
SEG 1834-M

MC81-17
TASK 5

STA	+	↑	-	ELEV	DESC
TP-6				4.176	
	4.611	8.787			
			4.232		
				4.555	N. SIDE OF TOP OF OUTER CASING OF S.WESTERLY WELL
BBCW7 GW2			4.448		
MW-2 (TP) ~~TP-4~~				4.339	N. SIDE OF TOP OF S.WESTERLY 2" PVC WELL
	4.412	8.751			
			4.199		
BBCW7 GW1				4.552	N. SIDE OF TOP OF OUTER CASING OF N.EASTERLY WELL
			4.342		
MW-4 (TP) ~~TP-5~~				4.409	N. SIDE OF TOP OF N.EASTERLY 2" PVC WELL
	4.308	8.717			
			4.537		
TP-7				4.180	(TP-6) 0.004 HIGH
	4.767	8.947			
			4.531		
TP-8				4.416	(TP-5) 0.003 HIGH
	~~4.814~~	~~9.230~~			
			~~3.767~~		
				~~5.463~~	(TP-4)

DAVID F
CHRIS C
NICK L

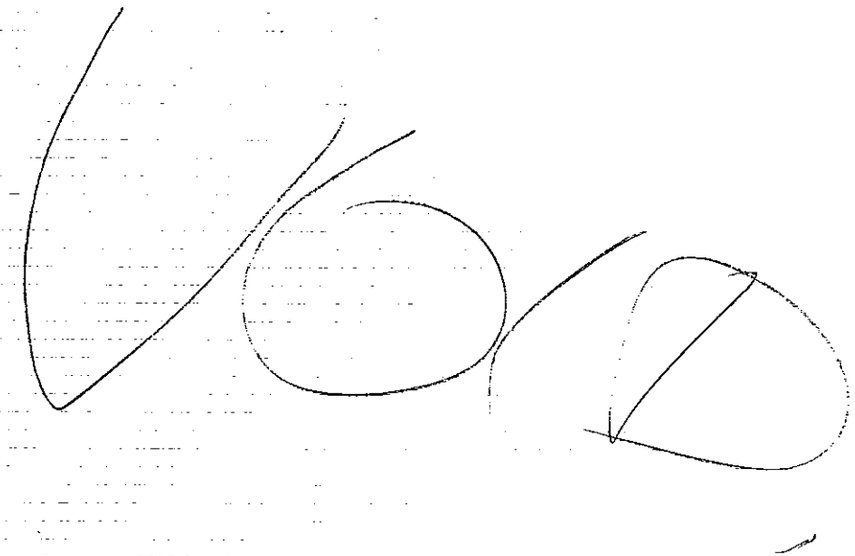
7-18-95

LEVEL RUN TO

MC81-18

STA	+	↑	−	ELEV	DESC
~~TP-8~~				~~4.416~~	
	~~4.677~~	~~9.093~~			
			~~3.645~~		
~~TP-10~~				~~5.398~~	
TP-8				4.416	
	4.753	9.169			
			3.768		
				5.401	

~~TP-4~~



DAVID F
[illegible]
NICK L

7-18-05

M-681-19

PEG TEST

STA	+	π	-	ELEV
NAIL-1				100' RANDOM PT FOR PEG TEST.
	4.434	104.434		
			5.133	
NAIL-2				99.305
	5.346	104.651		
			4.648	
NAIL-1				100.003
	4.677	104.680		
			5.359	
NAIL-2				99.321

DAVID F
TRACY B
NICK L

7-19-05

STA	+	−	ELEV	DESC
"A"			100'	NL
	5.133	105.133		
		4.450		
"B"			100.683	NL
	4.044	104.732		
		4.740		
"A"			99.992	
			4.416	SEE Pg 17
TP-8				
	5.047	9.463		
		4.069		
TP-9			5.394	(TP-1-SEG F)
	4.385	9.779		
		4.701		
TP-10			5.078	(TP-2-SEG F)
	4.055	9.133		
		4.140		
TP-11			4.988	(TP-3-SEG F)
	5.817	10.805		
		3.088		
TP-12			7.717	(TP-4-SEG F)
	7.652	15.369		
		4.542		
BM			10.827	TP-9

PEG TEST FOR LEVEL RUN
TO BBCWMWTA & BA

M 681-20
TASK 5

SEG 1834 F

(TP-4 SEG M) 0.016 HIGH

(TP-3 SEG M) 0.015 HIGH

(TP-2 SEG M) 0.008 HIGH

(TP-1 SEG M) 0.004 HIGH

FROM SAM HALLS LEVEL RUN DOWN OLD CUTLER RD (SEE FB M 682)

DAVID F
TRACY B
NICK L

7-19-05

LEVEL RUN TO BBCWMW2A

SEG 1324 G

M631-21
TASK 11

STA	+	HI	−	ELEV	DESC.
A				100.00	RANDOM NL
	3.790	103.79			
			4.176		
B				99.614	RANDOM NL
	5.003	104.617			
			4.615		
A				100.002	0.002 HIGH
BM				5.330	R-724
	5.800	11.130			
			4.478		
TP-1				6.652	NL
	4.457	11.109			
			4.934		
TP-2				6.175	NL
	4.840	11.015			
			7.479		
TP-3				3.536	NL
	2.011	5.547			
			4.628		
TP-4				0.919	NL

200' ±

PEG TEST

DAVID F
TRACY B
NICK L

7-19-05

LEVEL RUN TO BBCWMW2A

SEG 18346

M681-22
TASK 11

STA	+	↑	−	ELEV	DESC.
TP-4				0.919	
	4.985	5.904			
			5.147		
TP-5				0.757	NL
	5.432	6.189			
			5.246		
TP-6				0.943	NL
	4.765	5.708			
			4.572		
TP-7				1.136	NL
	4.766	5.902			
			4.653		
TP-8				1.249	NL
	4.729	5.978			
			5.078		
TP-9				0.900	NL
	4.689	5.589			
			4.882		
TP-10				0.707	NL

DAVID F
TRACY B
NICK L

7-19-05

LEVEL RUN TO BBCWMW 2 A

SEG 1834 G

MG81-23
TASK 11

STA	+	π	−	ELEV	DESC
TP-10				0.707	
	4.717	5.424			
			4.485		
				0.939	N. RIM OF OUTER CASING
			4.585		
MW (TP) TP-11				0.839	TOP OF 2" PVC WELL @ N. SIDE OF PIPE
	4.532	5.371			
			4.459		
TP-11				0.912	NL
	4.467	5.379			
			4.438		
TP-12				0.941	NL
	4.824	5.765			
			4.807		
TP-13				0.958	NL
	5.044	6.002			
			4.860		
TP-14				1.142	NL
	4.721	5.863			
			4.676		
TP-15				1.187	NL

Matched BBCW2 NGVD29 Elevation on Well Elevation Chart

Does not match any wells shown on Well Elevation Chart

DATE 7-19-05
TRACT B
NICK L

LEVEL RUN TO BBCWMW2A

SEG 1834G

M681-24
TASK 5.

STA	+	∓	−	ELEV	DESC
TP-15				1.187	
	4.638	5.825			
			4.846		
TP-16				0.979	NL
	4.562	5.541			
			4.798		
TP-17				0.743	NL
	4.847	5.590			
			4.892		
TP-18				0.698	NL
	5.171	5.869			
			4.744		
TP-19				1.125	NL
	5.316	6.441			
			4.610		
TP-20				1.831	NL
	9.949	11.780			
			6.486		
BM				5.294	R-722

0.036 LOW

M682

FLT

Geosystems

8411

B. Bay wells

S. HALL
C. CAMPANELLA

M682-5

NGS F61 1 (AC1178)
7.1325316666' (2.174m) NAVD88
8.66139999' (2.640m) NGVD29

CONT PG 9

BISCAYNE BAY COASTAL WORKS

BENCH LINE
TASK #7
SEGMENT "1334 A"

STA	BS	HI	FS	EL	BM	DESC	
S1	3.145	10.275		7.13	F61 1	BRASS DISC IN CONC	NAVD 88
S2	6.115	11.796	4.594	5.681		TP 1	NC
S3	5.024	12.230	4.590	7.206		TP 2	NC
S4	4.915	12.715	4.430	7.800		TP 3	NC
S5	4.994	12.701	5.008	7.707		TP 4	NC
S6	3.685	11.556	4.830	7.871		TP 5	NC
	4.184	9.889	5.951	5.705		TP 6	NC
			4.628	5.261	V 3/4		
					R 725	BRASS BAR	

NGS R725 (AC1180)
5.25917583333' (1.603m) NAVD88
6.784763333' (2.068m) NGVD29

S HALL
C CAMPBELL
[illegible]

16 July 2005

Cloudy & Hot
90°

M682-6

NGS F61 1 (AC1178)
7.1325316666' (2.174m) NAVD88
8.66139999' (2.640m) NGVD29

Biscayne Bay [illegible]
[illegible]

Bench [illegible]
TASK

STA	BS	HI	FS	EL	BM	DESC
S1	2.169 ✓	9.299 ✓		7.13	F61 1	NGVD 88 [illegible] on bridge @ entrance to Bayfront Park
S2	5.205 ✓	7.619 ✓	6.385 ✓	2.414 ✓		TP 1 NL
S3	4.859 ✓	7.275 ✓	5.203 ✓	2.416 ✓		TP 2 NL
S4	5.252 ✓	7.524 ✓	5.003 ✓	2.272 ✓		TP 3 NL
S5	5.378 ✓	7.616 ✓	5.236 ✓	2.238 ✓		TP 4 NL
S6	4.785 ✓	7.461 ✓	4.940 ✓	2.676 ✓		TP 5 NL
S7	[illegible] ✓	7.333 ✓	4.532 ✓	2.929 ✓		TP 6 NL
S8	4.739 ✓	8.046 ✓	4.531 ✓	3.307 ✓		TP 7 NL
S9	5.153 ✓	8.738 ✓	4.461 ✓	3.585 ✓		TP 8 NL
S10	5.584 ✓	9.015 ✓	5.307 ✓	3.431 ✓		TP 9 NL
S11	4.118 ✓	8.378 ✓	4.755 ✓	4.260 ✓		TP 10 NL
S12	4.780 ✓	8.571 ✓	4.597 ✓	3.791 ✓		TP 11 NL
S13	5.059 ✓	8.792 ✓	4.838 ✓	3.733 ✓		TP 12 NL
S14	5.131 ✓	9.221 ✓	4.702 ✓	4.090 ✓		TP 13 NL
S15	5.426 ✓	6.619 ✓	5.028 ✓	1.193 ✓		TP 14 NL
S16	5.011 ✓	6.223 ✓	5.407 ✓	1.212 ✓		TP 15 NL
S17	5.483 ✓	6.289 ✓	5.417 ✓	.806 ✓		TP 16 NL
S18	5.331 ✓	6.227 ✓	5.393 ✓	.896 ✓		TP 17 NL
S19	5.083 ✓	6.163 ✓	5.147 ✓	1.080 ✓		TP 18 NL

S. HALL
C CAMPANERIA
J SEVILA

M682-7

BISCAYNE BAY WELL
SECMUT "1334C"
BENCH RUN (CONT'D)
TASK 8

STA	BS	HI	FS	EL	BM	DESC	
		6.163					
S 20	4.656	5.672	5.180	.956		TP 19	NC
S 21	5.334	6.203	4.743	.869		TP 20	
S 22	5.034	5.966	5.271	.932		TP 21	
S 23	5.142	6.032	5.076	.890		TP 22	
S 24	5.202	6.135	5.099	.933		TP 23	
S 25	5.685	6.843	4.977	1.158		TP 24	
S 26	5.069	8.961	2.951	3.892		TP 25	
S 27	5.396	9.495	4.852	4.109		TP 26	
S 28	4.707	9.174	5.028	4.467		TP 27	
S 29	5.289	9.766	4.697	4.477		TP 29	
S 30	4.644	8.909	5.501	4.265		TP 29	
S 31	5.139	9.133	4.915	3.997		TP 30	
S 32	5.057	9.0[illegible]	5.130	3.953		TP 31	
S 33	4.993	9.0[illegible]	4.970	4.040		TP 32	
S 34	5.209	9.007 203	5.061	3.972		TP 33	
			5.119	~~3.232~~ 4.039	TBM	TP 20	DAVE FISHBINE BENCH RUN
S 37	3.445	7.334	4.300	3.79 3.05	F59		

DCBM
3.919
NAVD 88
TP 25
F59 EL 4.51
3.05 NAVD

NGS F59 (AC1168)
3.05445583333' (0.931m) NAVD88
4.580043333' (1.396m) NGVD29

S. HALL [book symbol]
C CAMPANELLA ⊼
J SEWICK ∅

16 Jul 2002 Cloudy & HOT 90°

M632-8

BISCAYNE BAY COASTAL
BENCH WN
SEGMENT 3BCA
TASK 7

NOTES: See Pg 5 BOOK M632

PREV See Pg 5

STA	BS	HI	FS	EL	BM	DESC
59	4.208	9.913		5.705		NL TP 6
	6.570	11.910	4.673	5.240		NL TP 7
	2.682	9.784	4.708	7.102		NL TP 8
			7.472	2.312		WELL 9'MW A **BBCW9B**
			7.307	2.477		GND @ 9 MW A
			7.436	2.348		WELL 9 MW B **BBCW9A**
	7.223	9.732	7.275	2.509		GND @ 9 MW B
	4.728	11.818	2.642	7.090		NL TP 8
	4.847	10.077	6.588	5.230		NL TP 7
	4.450	10.144	4.383	5.694		NL TP 6
			4.393	5.251	R 725	(5.261)

−.01

S. HALL
C CAMPANELLA
E SILVA

17 July 2006

M692-9

BISCAYNE BAY WELLS
SEGMENT "1934 E"
BENCH RUN
TASK 2

STA	BS	HI	FS	EL	BM	DESC
S1	4.531	9.791		5.26	R-725	
S2	5.694	10.323	5.162	4.629		NL TP1
S3	5.107	10.593	4.837	5.486		NC TP2
S4	4.867	10.388	5.072	5.521		NC TP3
S5	4.860	9.953	5.295	5.093		NC TP4
S6	4.192	10.046	4.099	5.854		NL TP5
S7	4.515	9.815	4.746	5.300		NC TP6
S8	5.175	9.620	5.370	4.445		NC TP7
S9	5.787	10.416	4.991	4.629		NC TP8
S10	5.252	10.000	5.668	4.748		NC TP9
S11	5.063	9.566	5.497	4.503		NC TP10
S12	5.899	10.151	5.303	4.263		NL TP11
S13	4.711	9.649	5.213	4.930		NC TP12
S14	5.559	10.015	5.193	4.443		NC TP13
S15	4.876	10.091	4.792	5.215		NC TP14
S16	5.294	10.933	4.739	5.653		NC TP15
S17	3.981	9.344	5.384	5.363		NC TP16
S18	4.589	7.261	6.672	2.672		NC TP17
S19	5.947	7.725	5.483	1.778		NC TP18

NGS R725 (AC1180)
5.25917583333' (1.603m) NAVD88
6.784763333' (2.068m) NGVD29

S HALL
C CAMPANERIA
J S[illegible]

17 JUNE 2005

CYG NOT
90°

MG 82-10

BISCAYNE BAY WELLS
SEGMENT "334 S"
BENCH RUN (CONT)

STA	BS	HI	FS	EL	EL	DESC
		7.725				
S20	5.006 ✓	7.781	4.950 ✓	2.775		NC TP 19
S21	4.940 ✓	8.001	4.620 ✓	3.161		NC TP 20
S22	5.504 ✓	8.185	5.320 ✓	2.681		NC TP 21
S23	5.314 ✓	8.130	5.369 ✓	2.816		NC TP 22
S24	4.874 ✓	7.503	5.501 ✓	2.629		NC TP 23
S25	5.288 ✓	8.078	4.713 ✓	2.790		NC TP 24
S26	4.918 ✓	7.694	5.202 ✓	2.976		NC TP 25
S27	6.707 ✓	7.869	6.532 ✓	1.162	H 099	BRASS DISK / CONC
S28	5.440 ✓	8.325	4.943 ✓	2.885		NC TP 26
S29	4.114 ✓	7.197	5.242 ✓	3.083		NC TP 27
S30	5.304 ✓	7.[illegible]	5.031 ✓	2.[illegible]		NC TP 28
S31	5.114 ✓	7.445	5.139 ✓	2.331		NC TP 29
S32	5.356 ✓	7.221	5.430 ✓	2.006		NC TP 30
S33	5.179 ✓	7.240	5.155 ✓	2.065		NC TP 31
S34	5.538 ✓	7.874	4.903 ✓	2.336		NC TP 32
			5.068 ✓	2.806		NC TP 33
			2.343 ✓	5.531		MW 3A BBCW3 GW2
			2.303 ✓	5.571		MW 3B BBCW3 GW1
			5.270 ✓	2.604		GNO

S. HALL ☐
C CAMPANELLA T
J SOLIS Ø

17 JUN 2005

M682-11

BISCAYNE BAY COASTAL
SEGMENT "B&C E"
BENCH MONUMENT

STA	BS	HI	FS	EC	BM
S 35	5.106	7.912		2.806	
S 36	4.921	7.257	5.576	2.336	
S 37	5.035	7.095	5.197	2.065	
S 38	4.926	6.880	5.141	1.954	
S 39	5.146	7.466	4.560	2.326	
S 40	5.692	7.839	5.309	2.157	
S 41	5.027	8.001	4.365	2.979	
S 42	5.009	7.899	5.111	2.990	
S 43	4.928	7.603	5.228	2.675	
S 44	5.234	7.383	5.494	2.119	
S 45	4.793	7.460	4.090	2.667	
S 46	5.385	9.080	5.385	3.695	
S 47	5.099	9.151	5.027	4.053	
S 48	7.850	12.045	4.955	4.195	
S 49	5.146	13.214	3.977	8.068	
S 50	5.172	13.365	4.523	8.699	
S 51	5.157	12.878	6.142	7.721	
S 52	4.482	11.714	5.646	7.232	
S 53	5.011	11.249	5.416	6.234	
S 54	5.425	12.562	4.712	7.137	

DESC

NC TP 33
TP 32

NC TP 39
NC TP 39
NC TP 40
NC TP 41
NC TP 42
NC TP 43
NC TP 44
NC TP 45
NC TP 46
NC TP 47

S. HALL FM
C CAMPANELLA T
J SEVILLA ⊕

17 JULY 2001

CLDY HOT
93°

M682-12

BISCAYNE BAY WELLS
SEGMENT "1834C"
BENCH RUN
TASK 9

STA	BS	HI	FS	EL	BM	DESC
536	4.961	5.944		.983	TBM	NL TP 19
			2.646	3.298		MW 4A
			4.654	1.290		GND
			4.962	.982		NL TP 19

BBCW4A

S HALL [illegible]
C. CAMPANELLA
J SOVICA

18 JUL 2002

CUG & HOT 90°

BISCAYNE BAY WELLS
BENCH RUN (CONT)
SEGMENT "7364 E"

STA	BS	HI	FS	EL	BM	DESC
		12.562				
S.55	4.834	11.115	6.291	6.281		NC TP 48
S 56	5.139	11.558	4.696	6.419		
S 57	4.922	12.042	4.439	7.120		
S 58	3.766	10.509	5.299	6.743		
S 59	4.431	8.750	6.190	4.319		
			3.525	5.225	R 724	BRASS BM / CONC EL 5.33

= (.06)

NGS R745 (AC1181)
5.328073333' (1.624m) NAVD88
6.8536683333' (2.089m) NGVD29

G. ESTEBANEZ
S. LAL
P. LEYVA

BISCAYNE BAY WELL
WSM 1834

SUNNY — 18-08 — M682-14

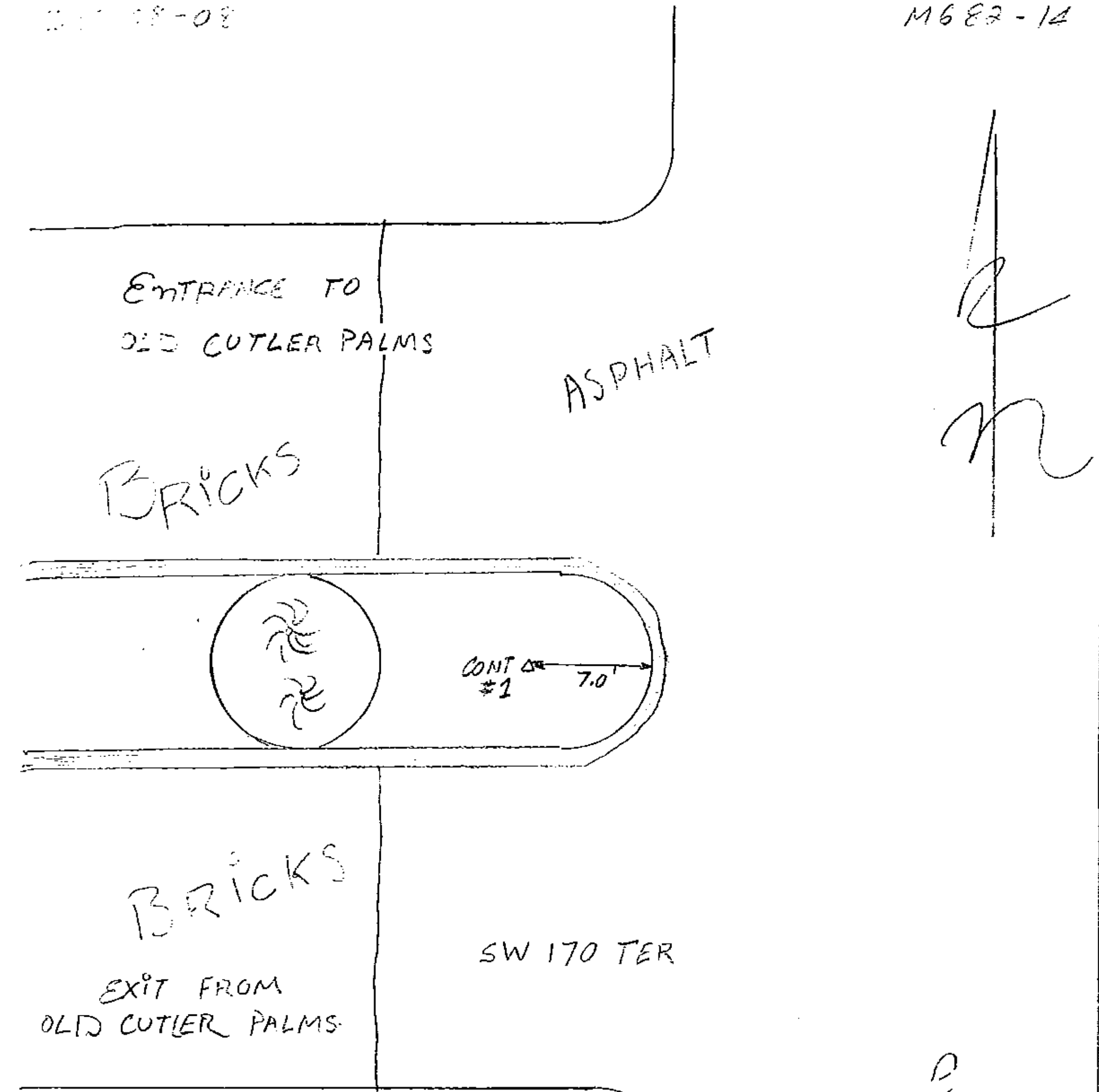
"WELLS LOCATION"

BASE @ TRAV 4
RECEIVER #1
A — HGT = 2.055M (@ BASE
START = 9:15 AM
END = 11:25AM

POINT #	DESCRIPTION
500	TRAV #2 CONTROL (60D nail)
501	CONT #1 (SET PK & WASHER)
502	TRAV #2 CONTROL (60D nail

BASE @ CONT #1
RECEIVER #1
START : 11:35AM
End : 2:20 PM

POINT #	DESCRIPTION
503	TRAV 4 CONTROL
504	TRAV 4 CONTROL
505	WELL 8A (SHOT TAKEN ON TOP OF CASIN)
506	WELL 8A (SHOT TAKEN ON PIPE)
507	WELL 8B (SHOT TAKEN ON TOP OF CASIN)
508	WELL 8B (SHOT TAKEN ON PIPE)



CONT #1 SET PK & WASHER ON THE WEST SIDE OF INTERSECTION OF SW170 TER & OLD CUTLER R, ALSO IS 7.0' WEST OF BULL NOSE OF YELLOW PAINTED SEPARATOR.

NORTHING 465547.487
EASTHING 883410.271
ELEV. 11.042'

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R. LEYVA

BISCAYNE BAY WELL
WSM 1834

SUNNY

Aug. 08 - 05

M682 - 15

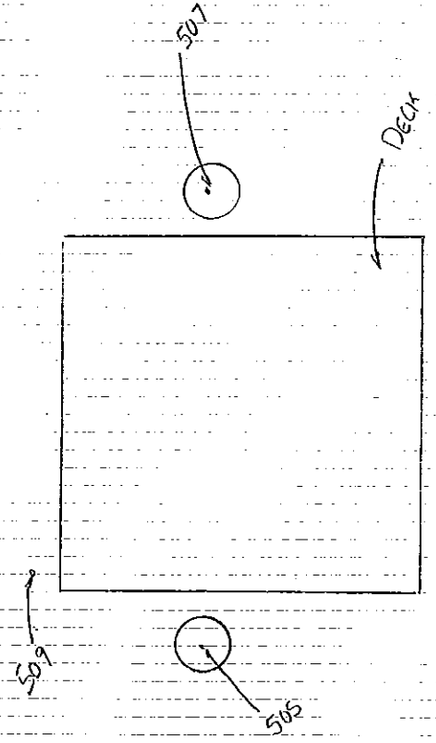
WELLS LOCATION

POINT #	DESCRIPTION
509	SHOT TAKEN ON BOTTOM OF OCEAN
510	SHOT TAKEN @ WATER LEVEL
511	SHOT TAKEN ON DECK
512	TRAV # 1 CONTROL

BASE @ PT 093
RECEIVER # 1
ANT HGT = 2.000M
START = 4:35 PM
END = 6:51 PM

JOB # 1834-2

POINTS #	DESCRIPTION
550	R-725 Control
551	WELL 10 A (TOP OF CASING)
552	WELL 10 A (SHOT TAKEN ON PIPE)
553	WELL 10 B (TOP OF CASING)
554	WELL 10 B (SHOT TAKEN ON PIPE)
555	DECK
556	WATER LEVEL
557	BOTTOM
558	R-725 CONTROL



G. ESTEBANEZ
J. HERNANDEZ
R. LEYVA
JC SEVILA

BISCAYNE BA[illegible] W[illegible]
W[illegible] 34-2

SUNNY Aug 9-05

M682-16

WELL L[illegible]TIONS

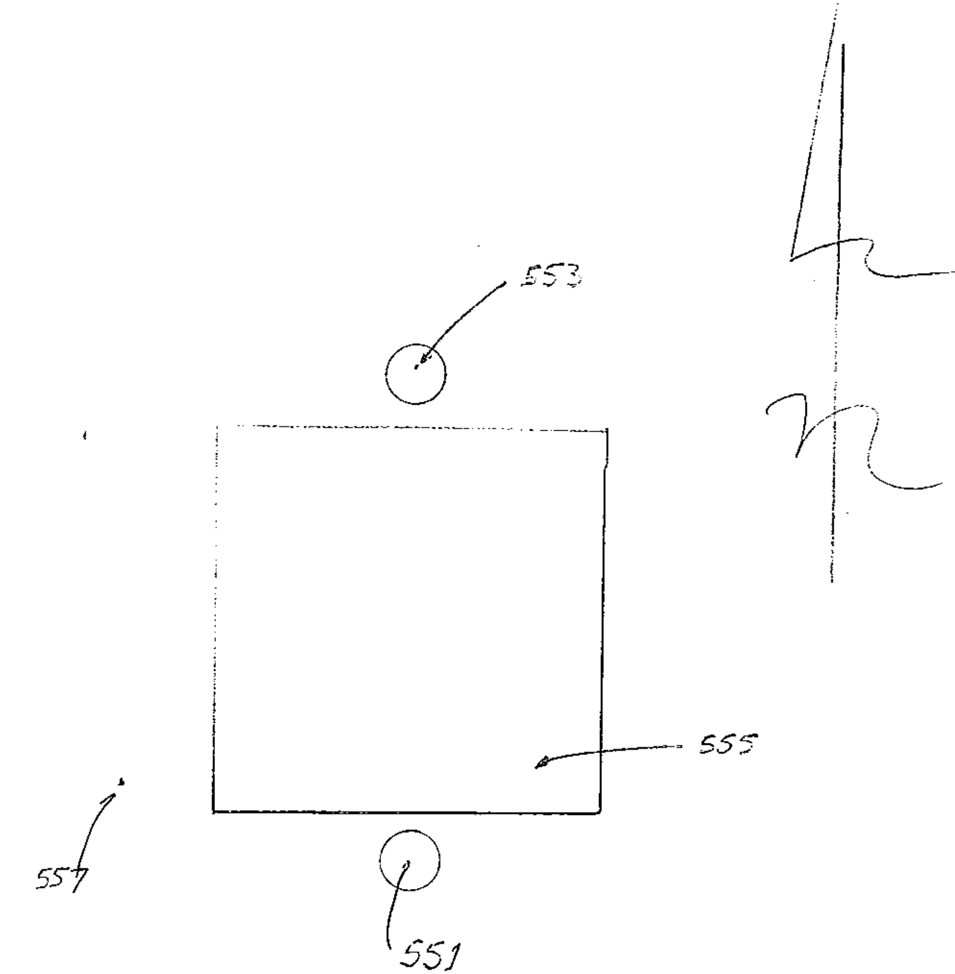
B[illegible] @ H-09?
RECEIVER #1
ANT Hgt = 2.000M
START = 7:45 AM
End = 9:00 AM

POINT #	DESCRIPTION
559	R-725
560	CONT. #2 PK & WASHER
561	CONT. #2 PK & WASHER
562	R-725

BASE @ CONT #2
RECEIVER #1
ANT Hgt = 2.000M
START = 9:35 AM
End = 11:55 AM

POINT #	DESCRIPTION
563	H-098 CONTROL
564	R-725 CONTROL
565	CONT. #3 PK nail
566	CONT. #3 PK nail
567	H-098 CONTROL

CONT #3: SET PK nail 1.0' NORTH OF SOUTH EP OF A BIKE PATH
SITUATED ON THE NORTH SIDE OF SW 344 ST
TO REACH THE STATION FROM INTERSECTION OF SW 137 AVE
& SW 344 ST, go WEST ON SW 344 ST FOR ± 0.9 MILE, JUST ON
THE CURVE, also is 15' SOUTH OF POWER POLE #6068,
also #00185



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BISCAYNE BAY WELL

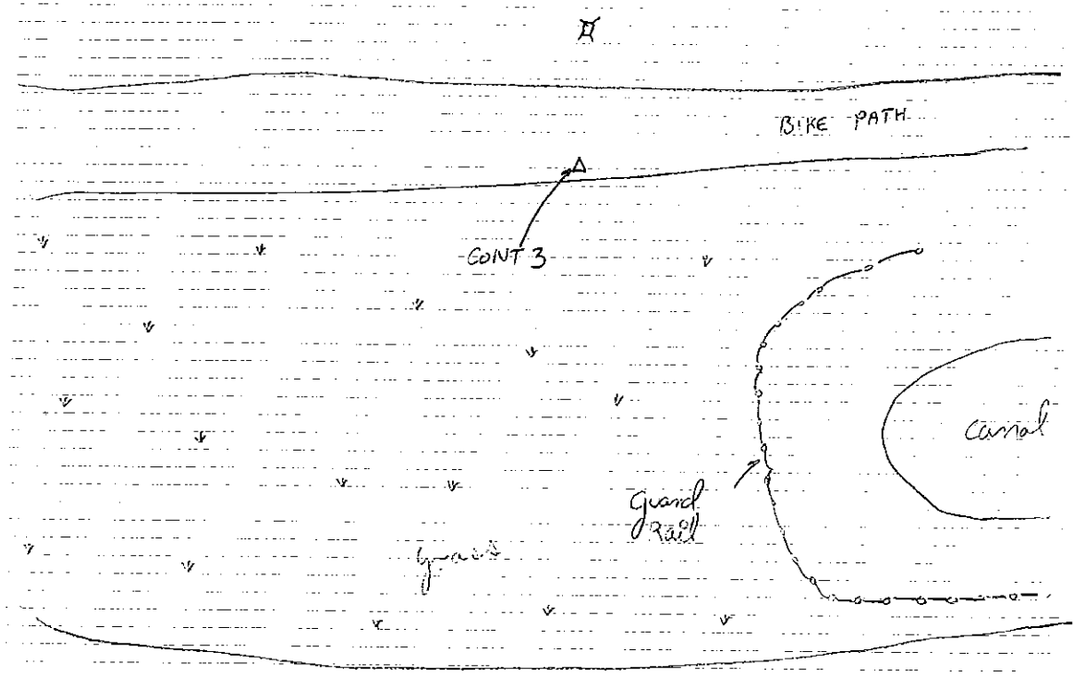
WSM 1834-2

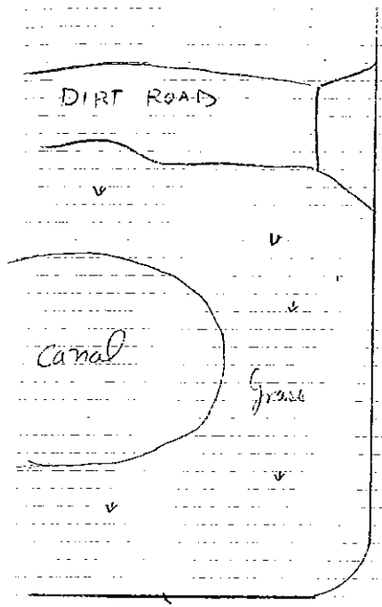
WELL LOCATION

SUNNY

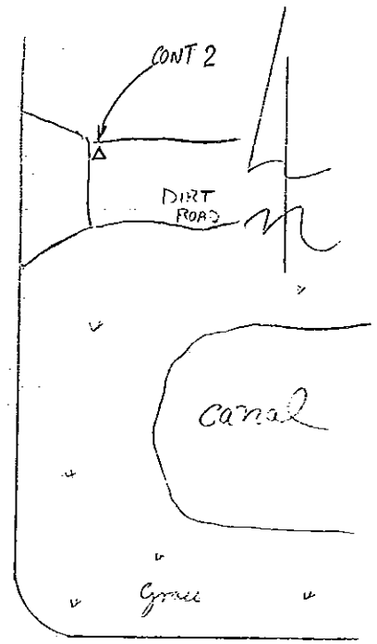
AUG 09-05

M682 - 17





SW 117 AVE

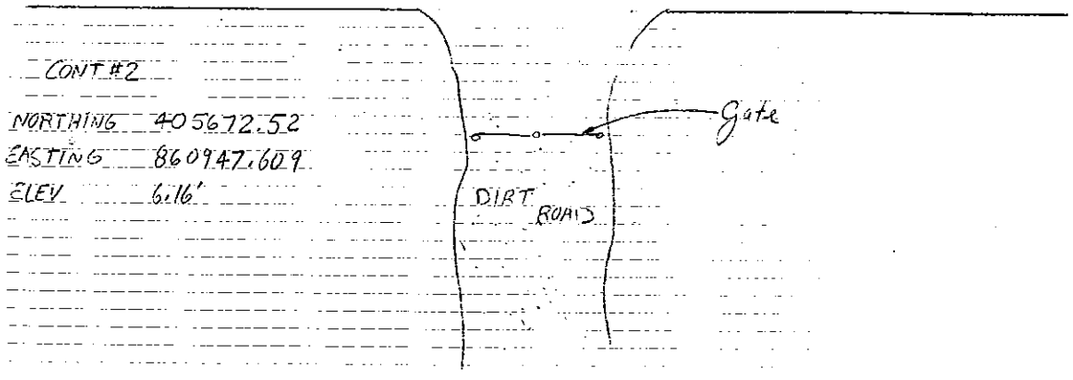


CONT #2: SET PK & WASHER.
THIS POINT IS LOCATED 125' NORTH OF INTERSECTION OF SW 344 ST & SW 117 AVE, ALSO IS SITUATED 250' EAST OF ℄ OF SW 117 AVE. ALSO IS LOCATED @ THE ENTRANCE OF A DIRT ROAD GOING EAST. THERE IS 12.5' FROM EAST EP TO THE MARK

SW 344 ST
(PALM DR)

CONT #2

NORTHING 405672.52
EASTING 860947.609
ELEV 6.16'



G. ESTEBANEZ
C.J. HERNANDEZ
J.C. SEVILA
R. LEYVA

BISCAYNE BAY WELL

WSM [illegible] 34-3

WELL LOCATION

SUNNY

aug 09-05

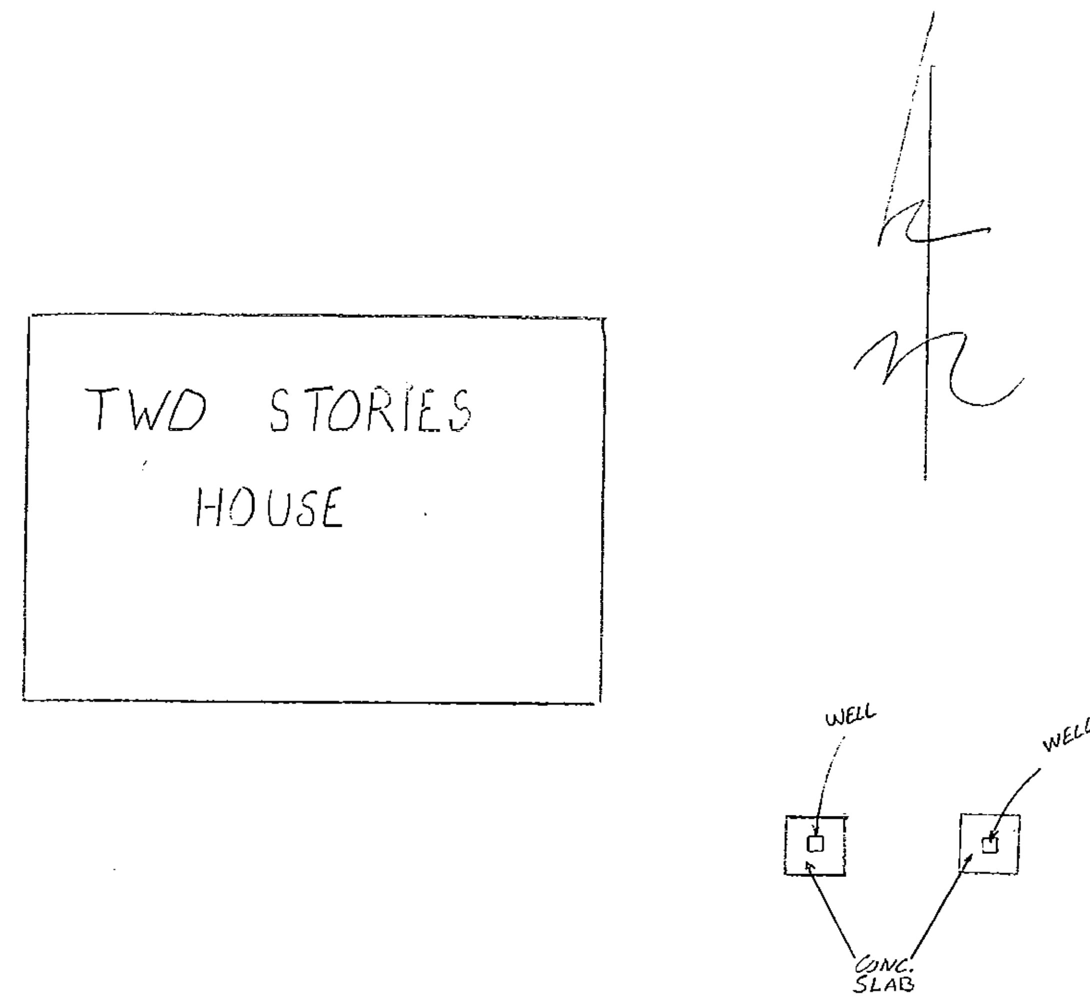
M682-18

BASE @ CONT #3
RECEIVER #1
ANT HGT = 2.000 M
START: 12:20 PM
END = 2:06 PM

POINT #	DESCRIPTION
568	CONT#2 [illegible] (CONTROL)
569	WELL 6A (WEST WELL) TOP OF PIPE
570	WELL 6A (WEST WELL) TOP OF CASIN
571	CONCRETE SHOT NEXT TO WELL 6A
572	CONCRETE SHOT NEXT TO WELL 6B
573	WELL 6B (EAST WELL) TOP OF PIPE
574	WELL 6B (EAST WELL) TOP OF CASIN
575	CONT#2

* ALL PIPES FOUND INSIDE THE CASINGS ARE 2" PVC

CONT #3
NORTHING 405516.35
EASTING 843842.99[illegible]
ELEV 5.013'



Job N° 1834

BM RUN — Palm Dr (Homestead)

Antonio Cortes
Chris Campanero
Gerardo Fomes

T 90 °F

H68Z-18

08-09-05

Peg Test

A. 4.439 B: 4.537

C: 4.825 D. 4.924

STA	BS(+)	HI	FS(-)	Elev.
BM V314	3.406	9.566		6.16
TP1	4.013	10.20	3.379	6.187
TP2	4.08	9.824	5.034	5.116
TP3	5.257	10.173	4.903	4.921
TP4	4.546	9.487	5.237	4.941
TP5	4.219	8.982	4.724	4.763
BM Z 8 ES			4.062	4.92 (4.922)

NGS V314 (AC1165)
6.1745283333' (1.882m) NAVD88
7.703396666' (2.348m) NGVD29

Remarks:

Fnd STMD V 314

Elev. 6.16 See NGS Data Sheet

NGS 8ES (AC1164)
4.94421583333' (1.882m) NAVD88
6.469803333' (1.972m) NGVD29

Fnd STMD 8ES Elev 4.94 See NGS Data Sheet

Job N° 1934 | Palm Dr. Homestead | Antonio Cortes: N, Chris Campanera: T, Gerardo Ferrer: P | T 92°F | M682 /19 | 09-10-05

BM RON

Req Test

A 4.760 B: 4.857

C ; 5.082 D ; 5.179

STA	BS(-)	HI	FS(+)	Elev	Adj	Remarks
BH2		9.116				
8ES	4.176			4.94		Fnd STUD 8ES
						Elev 4.94
		8.94				
TP10			+534	4.532		
		9.343				
TP11	4.679		4.276	4.664		
		11.883				
TP12			5.061	4.282		
TP13			7.065	4.823		

NGS 8ES (AC1164)
4.94421583333' (1.882m) NAVD88
6.469803333' (1.972m) NGVD29

WSH 1834 BM RUN (Cont) Homestead

Same Crew T92° F #682 /20

08-10-05

STA	BS (+)	HI	FS (-)	Elev.	
		10.31			
TP13	5.487		4.823	4.823	
		9.038			
TP14	4.320		5.592	4.718	
		9.937			
TP15	5.058		4.159	4.879	
		9.847			
TP16	5.753		5.843	4.094	
		9.508			
TP17	5.212		5.551	4.296	
		9.130			
TP18	4.352		4.730	4.778	
TP19			4.446	4.684	

Remarks

WSM 1834 BM RUN (Cont.) Palm Dr Homestead Sarre Crew T92°F 4682/21 08-10-05

STA	BS (+)	HI	FS (-)	Elev. Adj.	Remarks
TP19	5.155	9.839		4.634	
TP20	5.609	9.616	5.832	4.007	
TP21	4.370	9.256	4.730	4.886	
TP22	5.890	11.516	3.630	5.626	
C3 GPS			6.455	5.061	
TP23	6.027	9.473	8.070	3.446	
TP24			5.939	3.535	

WSM 1834 BH ??? Cen— Falin Dr. Horrateau

Same Crew T92°F U682 /22 08-10-05

STA	BS(+)	HI	FS(-)	Elev	Adj.	Remarks
		9.666				
TP 24	6.131			3.535		
		7.077				
TP 25	2.853		5.442	4.224		
		6.976	5.273	1.804		
TP 26	5.172					
		6.959				
TP 27	4.699		4.646	2.26		
		6.782				
TP 28	4.683		4.862	2.097		
		6.635				
TP 29	4.517		4.664	2.118		
TP 30			4.557	2.078		

WSH 1934 BM RUN (Cont) Palmer Homestead Game Cer T92°F 4682/23 08-10-05

STA	BS	HI	FS	Elev	Adj	Remarks
		6.932				
TP30	4.854			2.078		
		7.090				
TP31	5.135		4.977	1.955		
		7.281				
TP32	4.939		4.748	2.342		
		6.685				
TP33	4.858		5.454	1.827		
		8.203				
TP34	6.135		4.617	2.068		
		6.684				
TP35	4.560		6.079	2.124		
TP36			4.994	1.69		

WSH 1831

BM RUN (Cont) Homestead

Same Crew T 92°F M682 1/24 05/10/05

STA	BS(+)	HI	FS(-)	Elev	Adj C	Remarks
		6.814				
TP36	5.124			1.69		
		6.510				
TP37	5.109		5.413	1.401		
		6.53				
TP38	4.695		4.675	1.835		
		6.657				
TP39	4.802		4.675	1.855		
		6.697				
TP40	5.227		5.187	1.47		
6A1			5.159	1.539		ON CONC SLAB
6B1			5.336	1.361		ON CONC SLAB
6A2			2.455	4.242		Top of pipe 5"
6A3			2.848	3.849		Top of PVC BBC6B

WSM 1834 BM BOIJ (?) Homestead Sans Creus T92°F M 682 '25
08-10-05

STA	BS (+)	HI	FS (-)	Elev	Adj	Remarks
		6.697				
6B2			2.639	4.059		Top of Pipe
6B3			2.990	3.707		Top of PVC BBCW6A
		6.697				
TP41	4.570		4.570	2.127		
		6.577				
TP 50	5.112		5.132	1.465		
		6.589				
TP51	4.749		4737	1.84		
		6.279				
TP52	4461		4.771	1.818		
TP53			4.904	1.375		

WSM 1834 BM RUN Homestead Same Crew T92°F H682 1/26
08-10-05

STA	BS(+)	HI	FS(-)	Elev	Adj	Remarks
		6.862				
TP53	5.487			1.375		
		6.629				
TP54	4.937		5.17	1.692		
		7.917				
TP55	5.776		4.499	2.141		
		6.670				
TP56	4.606		5.353	2.064		
		7.287				
TP57	5.462		4.315	1.825		
		7.009				
TP58	4.672		4.950	2.337		
TP59			5.061	1.948		

[illegible] Same Crew T9 3?± U682 /27

BM RUN [illegible] 08-10-05

STA	BS (+)	HI	FS (-)	Elev.	N / C	Remarks
TP59	4.850	6.793		1.943		
TP60	4.463	6.52	4741	2.057		
TP61	4.711	6.819	4 412	2.108		
TP62	48 61	6.921	4.759	2.06		
TP63	4.556	6.793	4.684	2.237		
TP64	5.604	7.386	5.011	1.782		
TP65			3.191	4.195		

WSH 1334 | Same Crew | T 92°F | H682 /28

EMEWN | Homestead | 08-105

STA	BS(+)	HI	FS(-)	Elev	Adj	Remarks
		9.578				
TP65	5.383			4.195		
		9.248				
TP66	5.748		6.078	3.50		
		10.758	5.363	3.385		
TP67	7.373					
		8.989				
TP68	3.378		5.147	5.611		
TP69	4.430	9.311	4.108	4.881		
		9.727				
TP70	5.719		5.303	4.008		
TP71			5.057	4.67		

WSH 1326 BM RUN (Cont) [illegible] Same Crew T 92°F H682 /25

08-10-05

STA	BS(+)	HI	FS(-)	Elev	Adj	Remarks
		8.850				
TP71	4.180			4.670		
		9.318				
TP72	4.564		4.096	4.754		
		9.650				
TP73	5.375		5.043	4.275		
		9.678				
TP74	5.610		5.532	4.068		
TP75	4.007	8.87	4.315	4.863		
		10.288				
TP76	5.583		4.165	4.705		
TP77			5.482	4.806		

1884 EM RUN Homestead Sunny Breezy 72°F M682 1/30

09-10-05

STA	BS	HI	FS	ELEV	Remarks
TP77	7.118	11.924		4.806	
TP78	4.363	9.136	7.656	4.263	
TP79	4.269	8.927	4.478	4.658	
TP80	4.410	8.979	4.358	4.569	
EM2 8ES			4.047	4.932 (0.003)	Fnd STMP Elev. 4.94

NGS 8ES (AC1164)
4.94421583333' (1.882m) NAVD88
6.469803333' (1.972m) NGVD29

BISCAYNE BAY WELL

WEM 1334

Sunny

aug 15-05

Elev Run for control #1

STATION	(+)	MEAN	HI	(−)	MEAN	ELEV	DESCRIPTION
DCBM CD 181	5.02' 3.515' 2.005'	(3.513')	19.513' ~~18.127'~~			16.00	FND BRASS DISC, SET ON THE TOP OF THE WEST WALKWAY OF THE BRIDGE OVER CUTLER CANAL.
TP#1	5.32' 4.59' 3.86'	(4.59')	16.813' ~~15.427'~~	8.56' 7.29' 6.31'	(7.29')	12.223' ~~10.919'~~	SET PK nail ON EAST EDGE OF PAVEMENT OF OLD CUTLER Rd
CONTROL # 1	6.59' 5.31' 5.03'	(5.806')	~~16.799~~ ~~15.411'~~	6.55' 5.32' 5.08'	(5.85')	10.993 ~~9.605'~~	REFER TO PAGE 14
TP#2	7.45' 5.58' 5.695'	(6.575')	19.434' ~~18.046'~~	5.025' 3.91' 3.553'	(3.94')	12.859 ~~11.471'~~	SET PK nail ON EAST SIDE OF OLD CUTLER Rd JUST IN ℄ OF BIKE PATH
TP#3	5.01' 4.775' 4.545'	(4.776')	19.658 ~~18.27'~~	5.121' 4.551' 3.825'	4.832'	14.882 ~~13.494'~~	SET PK nail ON EAST SIDE OF OLD CUTLER Rd IN EDGE OF PAVEMENT
BM DCBM CD 182	6.965 6.710 6.460	(6.712)	21.347	5.35' 5.025' 4.695'	(5.023')	14.635 ~~13.247'~~	14.640
				5.590 5.340 5.090	(5.340)	16.007	16.00

```
Identification_Information:
        Citation:
                Citation_Information:
                        Originator: SFWMD
                        Publication_Date: Unpublished material
                        Publication_Time: Unknown
                        Title: BBCW Wells
                        Edition: 2
                        Geospatial_Data_Presentation_Form: map
                        Series_Information:
                                Series_Name: 1
                                Issue_Identification: 2
                        Publication_Information:
                                Publication_Place: Miami, Florida
                                Publisher: SFWMD, Weidener Surveying & Mapping, P.A.
                        Online_Linkage: www.weidener.com
                        Larger_Work_Citation:
                                Citation_Information:
                                        Series_Information:
                                        Publication_Information:
        Description:
                Abstract:
                        Weidener Surveying & Mapping, P.A. (LB4207), operating
                        under the authority of SFWMD was tasked with the
                        execution of a Specific Purpose Survey.   The project
                        area is contained within the Biscayne Bay Coastal
                        Wetlands area.
                Purpose:
                        At Biscayne Bay Coastal Wetlands in southern Miami-Dade
                        County, Florida, WSM located geotechnical well for
                        horizontal and vertical data.
        Time_Period_of_Content:
                Time_Period_Information:
                        Single_Date/Time:
                                Calendar_Date: 20050824
                        Range_of_Dates/Times:
                        Multiple_Dates/Times:
                Currentness_Reference: Publication Date
        Status:
                Progress: Complete
                Maintenance_and_Update_Frequency: As needed
        Spatial_Domain:
                Bounding_Coordinates:
                        West_Bounding_Coordinate: -80.4336
                        East_Bounding_Coordinate: -080.3058
                        North_Bounding_Coordinate: +25.6764
                        South_Bounding_Coordinate: +25.4298
        Keywords:
                Theme:
                        Theme_Keyword_Thesaurus: Tri - Service Spatial Data Standard
                        Theme_Keyword: Hydrography
                Place:
                Stratum:
                Temporal:
        Access_Constraints: None
        Use_Constraints:
                The information depicted represents the condition of the
                time of the survey.  Any assumptions thereafter are at the
                users risk/liability.
        Point_of_Contact:
                Contact_Information:
                        Contact_Person_Primary:
                                Contact_Person: Jorge Fernandez, PLS
                                Contact_Organization: Weidener Surveying & Mapping, P.A.
                        Contact_Organization_Primary:
                        Contact_Position: Project Manager / Director of Surveys
                        Contact_Address:
                                Address_Type: mailing and physical address
                                Address: 10418 NW 31 Terrace
                                City: Miami
```

```
                        State_or_Province: FL
                        Postal_Code: 33160
                        Country: USA
                Contact_Voice_Telephone: 305-599-6381
                Contact_Facsimile_Telephone: 305-599-2797
                Contact_Electronic_Mail_Address: jfernandez@weidener.com
                Hours_of_Service: regular businees hours
        Security_Information:
        Cross_Reference:
                Citation_Information:
                Series_Information:
                Publication_Information:
Data_Quality_Information:
        Attribute_Accuracy:
        Positional_Accuracy:
                Horizontal_Positional_Accuracy:
                Vertical_Positional_Accuracy:
        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_Contact:
                        Contact_Information:
                                Contact_Person_Primary:
                                Contact_Organization_Primary:
                                Contact_Address:
Spatial_Data_Organization_Information:
        Spatial_Reference_Information:
                Horizontal_Coordinate_System_Definition:
                        Geographic:
                        Planar:
                                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:
                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:
                                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: 20050824
        Metadata_Contact:
                Contact_Information:
                        Contact_Person_Primary:
                                Contact_Person: Jorge Fernandez, PSM
                                Contact_Organization: Weidener Surveying & Mapping, P.A.
                        Contact_Organization_Primary:
                        Contact_Position: Project Manager / Director of Survey
                        Contact_Address:
                                Address_Type: mailing and physical address
                                Address: 10418 NW 31 Terrace
                                City: Miami
                                State_or_Province: Fl
                                Postal_Code: 33172
                                Country: USA
                        Contact_Voice_Telephone: 305-599-6381
                        Hours_of_Service: 9-5
        Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata
        Metadata_Standard_Version: Current
        Metadata_Security_Information:
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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 25, 2015
 AC1164 ***********************************************************************
 AC1164  DESIGNATION -  8 ES
 AC1164  PID         -  AC1164
 AC1164  STATE/COUNTY-  FL/MIAMI-DADE
 AC1164  COUNTRY     -  US
 AC1164  USGS QUAD   -  HOMESTEAD (1994)
 AC1164
 AC1164                        *CURRENT SURVEY CONTROL
 AC1164  ______________________________________________________________________
 AC1164* NAD 83(1986) POSITION- 25 26 52.87   (N) 080 24 42.91    (W)    HD HELD1
 AC1164* NAVD 88 ORTHO HEIGHT -     1.507 (meters)         4.94   (feet) ADJUSTED
 AC1164  ______________________________________________________________________
 AC1164  GEOID HEIGHT    -        -25.097 (meters)                       GEOID12B
 AC1164  DYNAMIC HEIGHT  -          1.504 (meters)         4.93   (feet) COMP
 AC1164  MODELED GRAVITY -    978,970.9   (mgal)                         NAVD 88
 AC1164
 AC1164  VERT ORDER      -  SECOND    CLASS 0
 AC1164
 AC1164.The horizontal coordinates were determined by differentially corrected
 AC1164.hand held GPS observations or other comparable positioning techniques
 AC1164.and have an estimated accuracy of +/- 3 meters.
 AC1164.
 AC1164.The orthometric height was determined by differential leveling and
 AC1164.adjusted by the NATIONAL GEODETIC SURVEY
 AC1164.in June 1991.
 AC1164
 AC1164.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC1164.GEOID12B height accuracy estimate available here.
 AC1164
 AC1164.The dynamic height is computed by dividing the NAVD 88
 AC1164.geopotential number by the normal gravity value computed on the
 AC1164.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC1164.degrees latitude (g = 980.6199 gals.).
 AC1164
 AC1164.The modeled gravity was interpolated from observed gravity values.
 AC1164
 AC1164;                    North         East     Units  Estimated Accuracy
 AC1164;SPC FL E     -   123,598.4     259,146.9     MT  (+/- 3 meters HH1 GPS)
 AC1164
 AC1164                          SUPERSEDED SURVEY CONTROL
 AC1164
 AC1164  NGVD 29 (??/??/92)    1.972   (m)             6.47    (f) ADJ UNCH    2 0
 AC1164
 AC1164.Superseded values are not recommended for survey control.
 AC1164
 AC1164.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC1164.See file dsdata.txt to determine how the superseded data were derived.
 AC1164
 AC1164_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ5912614688(NAD 83)
 AC1164
 AC1164_MARKER: DD = SURVEY DISK
 AC1164_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 AC1164_SP_SET: BRIDGE
 AC1164_STAMPING: 8 ES 1955
 AC1164_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
```

AC1164_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AC1164+SATELLITE: SATELLITE OBSERVATIONS - April 17, 2005
AC1164
AC1164 HISTORY   - Date   Condition   Report By
AC1164 HISTORY   - 1955   MONUMENTED   USGS
AC1164 HISTORY   - 1970   GOOD   NGS
AC1164 HISTORY   - 1982   GOOD   LOCSUR
AC1164 HISTORY   - 1987   GOOD   USPSQD
AC1164 HISTORY   - 1987   GOOD   USPSQD
AC1164 HISTORY   - 1988   GOOD   USPSQD
AC1164 HISTORY   - 1989   GOOD   USPSQD
AC1164 HISTORY   - 19901230 GOOD   USPSQD
AC1164 HISTORY   - 19950910 GOOD   USPSQD
AC1164 HISTORY   - 20050417 GOOD   INDIV
AC1164
AC1164   STATION DESCRIPTION
AC1164
AC1164'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC1164'3.9 MI E FROM FLORIDA CITY.
AC1164'ABOUT 3.9 MILES EAST ALONG PALM DRIVE FROM THE INTERSECTION OF
AC1164'U.S. HIGHWAY 1 AT FLORIDA CITY, AT THE INTERSECTION OF PALM
AC1164'DRIVE AND TALAHASSEE ROAD (137 TH AVENUE), SET IN THE TOP OF THE
AC1164'WEST END OF THE SOUTH ABUTMENT FOR A 40-FOOT CONCRETE BRIDGE
AC1164'OVER THE FLORIDA CITY CANAL, 37 FEET NORTH OF THE CENTER LINE
AC1164'OF THE SOUTH LANE OF PALM DRIVE, 15 FEET WEST OF THE CENTER
AC1164'LINE OF TALAHASSEE ROAD, AND ABOUT LEVEL WITH THE ROAD.
AC1164
AC1164   STATION RECOVERY (1982)
AC1164
AC1164'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1982
AC1164'3.9 MILES ALONG PALM DRIVE FROM INTERSECTION OF U.S. HWY 1 AT FLORIDA
AC1164'CITY.
AC1164
AC1164   STATION RECOVERY (1987)
AC1164
AC1164'RECOVERY NOTE BY US POWER SQUADRON 1987 (TD)
AC1164'RECOVERED IN GOOD CONDITION.
AC1164
AC1164   STATION RECOVERY (1987)
AC1164
AC1164'RECOVERY NOTE BY US POWER SQUADRON 1987 (LEM)
AC1164'RECOVERED IN GOOD CONDITION.
AC1164
AC1164   STATION RECOVERY (1988)
AC1164
AC1164'RECOVERY NOTE BY US POWER SQUADRON 1988 (TD)
AC1164'RECOVERED IN GOOD CONDITION.
AC1164
AC1164   STATION RECOVERY (1989)
AC1164
AC1164'RECOVERY NOTE BY US POWER SQUADRON 1989 (TD)
AC1164'RECOVERED IN GOOD CONDITION.
AC1164
AC1164   STATION RECOVERY (1990)
AC1164
AC1164'RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC1164'RECOVERED IN GOOD CONDITION.
AC1164
AC1164   STATION RECOVERY (1995)
AC1164
AC1164'RECOVERY NOTE BY US POWER SQUADRON 1995
AC1164'RECOVERED IN GOOD CONDITION.
AC1164
AC1164   STATION RECOVERY (2005)
AC1164
AC1164'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2005 (WJR)

AC1164'BY USING AC4311 (H 111) I FOUND AC1164 TO BE AT 25 26 52.87822(N)
AC1164'80 24 42.91739(W)

*** retrieval complete.
Elapsed Time = 00:00:02

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 25, 2015
 AC1168 ***********************************************************************
 AC1168  DESIGNATION -  F 59
 AC1168  PID         -  AC1168
 AC1168  STATE/COUNTY-  FL/MIAMI-DADE
 AC1168  COUNTRY     -  US
 AC1168  USGS QUAD   -  ARSENICKER KEYS (1997)
 AC1168
 AC1168                        *CURRENT SURVEY CONTROL
 AC1168  ______________________________________________________________________
 AC1168* NAD 83(1986) POSITION- 25 26 52.      (N) 080 22 03.      (W)    SCALED
 AC1168* NAVD 88 ORTHO HEIGHT -      0.931 (meters)         3.05   (feet) ADJUSTED
 AC1168  ______________________________________________________________________
 AC1168  GEOID HEIGHT    -        -25.247 (meters)                       GEOID12B
 AC1168  DYNAMIC HEIGHT  -          0.929 (meters)         3.05   (feet) COMP
 AC1168  MODELED GRAVITY -    978,969.4   (mgal)                         NAVD 88
 AC1168
 AC1168  VERT ORDER      -  SECOND    CLASS 0
 AC1168
 AC1168.The horizontal coordinates were scaled from a topographic map and have
 AC1168.an estimated accuracy of +/- 6 seconds.
 AC1168.
 AC1168.The orthometric height was determined by differential leveling and
 AC1168.adjusted by the NATIONAL GEODETIC SURVEY
 AC1168.in June 1991.
 AC1168
 AC1168.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC1168.GEOID12B height accuracy estimate available here.
 AC1168
 AC1168.The dynamic height is computed by dividing the NAVD 88
 AC1168.geopotential number by the normal gravity value computed on the
 AC1168.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC1168.degrees latitude (g = 980.6199 gals.).
 AC1168
 AC1168.The modeled gravity was interpolated from observed gravity values.
 AC1168
 AC1168;                    North         East     Units  Estimated Accuracy
 AC1168;SPC FL E     -   123,590.      263,620.      MT  (+/- 180 meters Scaled)
 AC1168
 AC1168                          SUPERSEDED SURVEY CONTROL
 AC1168
 AC1168  NGVD 29 (??/??/92)    1.396  (m)             4.58    (f) ADJ UNCH    2 0
 AC1168
 AC1168.Superseded values are not recommended for survey control.
 AC1168
 AC1168.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC1168.See file dsdata.txt to determine how the superseded data were derived.
 AC1168
 AC1168_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ635146(NAD 83)
 AC1168
 AC1168_MARKER: Z = SEE DESCRIPTION
 AC1168_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 AC1168_STAMPING: DWC BM F 59
 AC1168_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 AC1168+STABILITY: SURFACE MOTION
 AC1168
```

```
AC1168  HISTORY     - Date     Condition        Report By
AC1168  HISTORY     - UNK      MONUMENTED       FL-025
AC1168  HISTORY     - 1970     GOOD             NGS
AC1168  HISTORY     - 1982     GOOD             LOCSUR
AC1168  HISTORY     - 1987     GOOD             USPSQD
AC1168  HISTORY     - 1987     GOOD             USPSQD
AC1168  HISTORY     - 1988     GOOD             USPSQD
AC1168  HISTORY     - 1989     GOOD             USPSQD
AC1168  HISTORY     - 19901230 GOOD             USPSQD
AC1168
AC1168                          STATION DESCRIPTION
AC1168
AC1168'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC1168'6.7 MI E FROM FLORIDA CITY.
AC1168'ABOUT 6.7 MILES EAST ALONG PALM DRIVE FROM THE INTERSECTION OF
AC1168'U.S. HIGHWAY 1 AT FLORIDA CITY, ALONG THE NORTH BANK OF THE
AC1168'FLORIDA CITY CANAL, 78 FEET EAST OF THE CENTER OF THE JUNCTION
AC1168'OF THE NORTH LANE OF PALM DRIVE AND 109 TH STREET, 22 FEET SOUTH
AC1168'OF THE CENTER LINE OF THE NORTH LANE OF PALM DRIVE, 5 1/2 FEET
AC1168'EAST OF A 14-INCH TREE, 1.1 FEET NORTH OF A METAL WITNESS POST,
AC1168'ABOUT LEVEL WITH THE DRIVE AND SET IN THE TOP OF A CONCRETE
AC1168'POST PROJECTING 1 INCH ABOVE THE LEVEL OF THE GROUND.
AC1168
AC1168                          STATION RECOVERY (1982)
AC1168
AC1168'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1982
AC1168'LOCATED ABOUT 6.7 MILES EAST ALONG PALM DRIVE FROM THE INTERSECTION
AC1168'OF U.S. 1 AT FLORIDA CITY.
AC1168
AC1168                          STATION RECOVERY (1987)
AC1168
AC1168'RECOVERY NOTE BY US POWER SQUADRON 1987 (TD)
AC1168'RECOVERED IN GOOD CONDITION.
AC1168
AC1168                          STATION RECOVERY (1987)
AC1168
AC1168'RECOVERY NOTE BY US POWER SQUADRON 1987 (LEM)
AC1168'RECOVERED IN GOOD CONDITION.
AC1168
AC1168                          STATION RECOVERY (1988)
AC1168
AC1168'RECOVERY NOTE BY US POWER SQUADRON 1988 (TD)
AC1168'RECOVERED IN GOOD CONDITION.
AC1168
AC1168                          STATION RECOVERY (1989)
AC1168
AC1168'RECOVERY NOTE BY US POWER SQUADRON 1989 (TD)
AC1168'RECOVERED IN GOOD CONDITION.
AC1168
AC1168                          STATION RECOVERY (1990)
AC1168
AC1168'RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC1168'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:01
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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 25, 2015
 AC1178 ***********************************************************************
 AC1178  DESIGNATION -  F 61 1
 AC1178  PID         -  AC1178
 AC1178  STATE/COUNTY-  FL/MIAMI-DADE
 AC1178  COUNTRY     -  US
 AC1178  USGS QUAD   -  ARSENICKER KEYS (1997)
 AC1178
 AC1178                        *CURRENT SURVEY CONTROL
 AC1178
 AC1178* NAD 83(1986) POSITION- 25 27 47.     (N) 080 20 49.     (W)    SCALED
 AC1178* NAVD 88 ORTHO HEIGHT -     2.174  (meters)        7.13  (feet) ADJUSTED
 AC1178
 AC1178  GEOID HEIGHT    -        -25.338  (meters)                      GEOID12B
 AC1178  DYNAMIC HEIGHT  -          2.170  (meters)        7.12  (feet) COMP
 AC1178  MODELED GRAVITY -    978,968.0    (mgal)                        NAVD 88
 AC1178
 AC1178  VERT ORDER      -  SECOND    CLASS 0
 AC1178
 AC1178.The horizontal coordinates were scaled from a topographic map and have
 AC1178.an estimated accuracy of +/- 6 seconds.
 AC1178.
 AC1178.The orthometric height was determined by differential leveling and
 AC1178.adjusted by the NATIONAL GEODETIC SURVEY
 AC1178.in June 1991.
 AC1178
 AC1178.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC1178.GEOID12B height accuracy estimate available here.
 AC1178
 AC1178.The dynamic height is computed by dividing the NAVD 88
 AC1178.geopotential number by the normal gravity value computed on the
 AC1178.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC1178.degrees latitude (g = 980.6199 gals.).
 AC1178
 AC1178.The modeled gravity was interpolated from observed gravity values.
 AC1178
 AC1178;                    North         East     Units  Estimated Accuracy
 AC1178;SPC FL E     -   125,290.      265,670.      MT  (+/- 180 meters Scaled)
 AC1178
 AC1178                          SUPERSEDED SURVEY CONTROL
 AC1178
 AC1178  NGVD 29 (??/??/92)    2.640  (m)             8.66   (f) ADJ UNCH    2 0
 AC1178
 AC1178.Superseded values are not recommended for survey control.
 AC1178
 AC1178.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC1178.See file dsdata.txt to determine how the superseded data were derived.
 AC1178
 AC1178_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ656163(NAD 83)
 AC1178
 AC1178_MARKER: Z = SEE DESCRIPTION
 AC1178_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 AC1178_SP_SET: BRIDGE
 AC1178_STAMPING: F 61 1 (DC)
 AC1178_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AC1178
```

```
AC1178  HISTORY     - Date     Condition        Report By
AC1178  HISTORY     - UNK      MONUMENTED       FL-025
AC1178  HISTORY     - 1970     GOOD             NGS
AC1178  HISTORY     - 1989     GOOD             USPSQD
AC1178  HISTORY     - 19901230 GOOD             USPSQD
AC1178  HISTORY     - 20050824 GOOD             WEIDEN
AC1178  HISTORY     - 20150410 GOOD             WANTGP
AC1178
AC1178                          STATION DESCRIPTION
AC1178
AC1178'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC1178'9.2 MI SE FROM PRINCETON.
AC1178'ABOUT 4.0 MILES EAST ALONG COCONUT PALM DRIVE FROM THE
AC1178'INTERSECTION OF U.S. HIGHWAY 1 AT PRINCETON, THENCE 5.25 MILES
AC1178'SOUTH ALONG A GRAVELED ROAD, SET ON THE TOP OF THE NORTH WALKWAY
AC1178'OF A BRIDGE OVER A CANAL (NORTH CANAL), 17 FEET NORTH OF THE
AC1178'CENTER LINE OF NORTH CANAL DRIVE, NEAR THE MAIN ENTRANCE TO THE
AC1178'HOMESTEAD BAY FRONT PARK, 2 FEET WEST OF THE EAST END OF THE
AC1178'BRIDGE WALKWAY AND 1 FOOT ABOVE THE LEVEL OF THE ROAD.
AC1178'NOTE-- MARK MAY BE REACHED BY GOING 7.8 MILES EAST ALONG PALM
AC1178'DRIVE FROM THE INTERSECTION OF U.S. HIGHWAY 1 AT FLORIDA CITY,
AC1178'THENCE 1.1 MILES NORTH ALONG A GRAVELED ROAD TO INTERSECTION
AC1178'OF NORTH CANAL DRIVE AND MARK ON LEFT.
AC1178
AC1178                          STATION RECOVERY (1989)
AC1178
AC1178'RECOVERY NOTE BY US POWER SQUADRON 1989 (TD)
AC1178'RECOVERED IN GOOD CONDITION.
AC1178
AC1178                          STATION RECOVERY (1990)
AC1178
AC1178'RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC1178'RECOVERED IN GOOD CONDITION.
AC1178
AC1178                          STATION RECOVERY (2005)
AC1178
AC1178'RECOVERY NOTE BY WEIDENER SURVEYING AND MAPPING 2005
AC1178'RECOVERED IN GOOD CONDITION.
AC1178
AC1178                          STATION RECOVERY (2015)
AC1178
AC1178'RECOVERY NOTE BY WANTMAN GROUP INC 2015 (JM)
AC1178'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02
```

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 25, 2015
 AC4311 ***********************************************************************
 AC4311  DESIGNATION -  H 111
 AC4311  PID         -  AC4311
 AC4311  STATE/COUNTY-  FL/MIAMI-DADE
 AC4311  COUNTRY     -  US
 AC4311  USGS QUAD   -  HOMESTEAD (1994)
 AC4311
 AC4311                        *CURRENT SURVEY CONTROL
 AC4311  ______________________________________________________________________
 AC4311* NAD 83(1990) POSITION- 25 26 52.39299(N) 080 24 43.15420(W)    ADJUSTED
 AC4311* NAVD 88 ORTHO HEIGHT -     1.49  (+/-2cm)         4.9    (feet) VERTCON
 AC4311  ______________________________________________________________________
 AC4311  GEOID HEIGHT    -        -25.097 (meters)                     GEOID12B
 AC4311  LAPLACE CORR    -         -3.39  (seconds)                    DEFLEC12B
 AC4311  HORZ ORDER      -  SECOND
 AC4311  VERT ORDER      -  THIRD ? (See Below)
 AC4311
 AC4311.The horizontal coordinates were established by classical geodetic methods
 AC4311.and adjusted by the National Geodetic Survey in May 1991.
 AC4311.
 AC4311.The NAVD 88 height was computed by applying the VERTCON shift value to
 AC4311.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 AC4311
 AC4311.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC4311.GEOID12B height accuracy estimate available here.
 AC4311
 AC4311.The vertical order pertains to the NGVD 29 superseded value.
 AC4311
 AC4311.The Laplace correction was computed from DEFLEC12B derived deflections.
 AC4311
 AC4311. The following values were computed from the NAD 83(1990) position.
 AC4311
 AC4311;                   North         East     Units Scale Factor Converg.
 AC4311;SPC FL E     -   123,583.672   259,140.124   MT  0.99998435   +0 15 09.6
 AC4311;SPC FL E     -   405,457.43    850,195.56    sFT  0.99998435   +0 15 09.6
 AC4311;UTM  17      - 2,814,673.487   559,119.945   MT  0.99964316   +0 15 09.6
 AC4311
 AC4311!             -  Elev Factor  x  Scale Factor =   Combined Factor
 AC4311!SPC FL E     -   1.00000371  x   0.99998435  =   0.99998806
 AC4311!UTM  17      -   1.00000371  x   0.99964316  =   0.99964687
 AC4311
 AC4311:                Primary Azimuth Mark                    Grid Az
 AC4311:SPC FL E     -  H 111 AZ MK                             000 28 44.7
 AC4311:UTM  17      -  H 111 AZ MK                             000 28 44.7
 AC4311
 AC4311|----------------------------------------------------------------------|
 AC4311| PID    Reference Object                    Distance      Geod. Az  |
 AC4311|                                                          dddmmss.s |
 AC4311| CW7646 H 111 AZ MK                                       0004354.3 |
 AC4311| AC4320 SOUTH MIAMI LABOR CAMP TANK         APPROX. 2.9 KM 0030054.1 |
 AC4311|----------------------------------------------------------------------|
 AC4311
 AC4311                         SUPERSEDED SURVEY CONTROL
 AC4311
 AC4311  NAD 83(1986)-  25 26 52.39265(N)    080 24 43.15247(W) AD(       ) 2
```

```
AC4311  NAD 27      -  25 26 50.99017(N)    080 24 43.95447(W) AD(       ) 2
AC4311  NGVD 29 (07/19/86)    1.95   (m)            6.4    (f) LEVELING    3
AC4311
AC4311.Superseded values are not recommended for survey control.
AC4311
AC4311.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AC4311.See file dsdata.txt to determine how the superseded data were derived.
AC4311
AC4311_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ5911914673(NAD 83)
AC4311
AC4311_MARKER: DD = SURVEY DISK
AC4311_SETTING: 0 = UNSPECIFIED SETTING
AC4311_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AC4311+SATELLITE: SATELLITE OBSERVATIONS - June 17, 2005
AC4311
AC4311  HISTORY     - Date     Condition        Report By
AC4311  HISTORY     - 1972     MONUMENTED       FL-025
AC4311  HISTORY     - 19950910 GOOD             USPSQD
AC4311  HISTORY     - 20050617 GOOD             INDIV
AC4311
AC4311                          STATION DESCRIPTION
AC4311
AC4311'DESCRIBED BY DADE COUNTY FLORIDA 1972 (JCF)
AC4311'STATION IS ABOUT 5.2 MILES WEST OF THE SHORE OF BISCAYNE BAY, ABOUT
AC4311'4.4 MILES EAST SOUTHEAST OF THE HOMESTEAD CITY HALL, AT THE
AC4311'INTERSECTION OF S.W. 137TH AVENUE AND S.W. 344TH STREET AND IN
AC4311'THE VICINITY OF THE SECTION CORNER COMMON TO SECTIONS 22, 23, 26
AC4311'AND 27 OF TOWNSHIP 57 SOUTH, RANGE 39 EAST.
AC4311'
AC4311'TO REACH FROM THE MAIN INTERSECTION OF THE CITY OF HOMESTEAD AT
AC4311'KROME AVENUE AND MOWRY STREET, PROCEED SOUTH ON KROME AVENUE (STATE
AC4311'ROAD 27) FOR 1.5 MILES TO THE INTERSECTION OF PALM DRIVE (S.W.
AC4311'344TH STREET), TURN LEFT AND PROCEED EAST ON S.W. 344TH STREET FOR
AC4311'4.0 MILES TO THE INTERSECTION OF S.W. 137TH AVENUE (TALLAHASSEE
AC4311'ROAD) AND THE STATION IN THE SOUTHWEST QUADRANT OF THE
AC4311'INTERSECTION ON THE SOUTH SIDE OF FLORIDA CITY CANAL.
AC4311'
AC4311'STATION MARK IS A BRASS DISK IN A CONCRETE MONUMENT WITH
AC4311'UNDERGROUND MARK, FLUSH WITH THE SHOULDER OF THE ROAD, MARKED
AC4311'FLORIDA-DADE AND STAMPED H-111.  IT IS 2.5 FEET SOUTH OF THE SOUTH
AC4311'EDGE OF PAVING ON S.W. 344TH STREET, 1.5 FEET NORTH OF A STEEL
AC4311'BARRICADE AND 40.5 FEET SOUTHWEST OF A 10 INCH CONCRETE MONUMENT
AC4311'IN THE CENTER OF THE INTERSECTION, SCRIBED RP 50 FT SO., MARKING
AC4311'THE SECTION CORNER OFFSET 50 FEET SOUTH.
AC4311'
AC4311'REFERENCE MARKS ARE SPIKES, CENTER PUNCHED AND DRIVEN THROUGH DADE
AC4311'COUNTY BRASS WASHERS INTO THE PAVING OF S.W. 344TH STREET.
AC4311'
AC4311'REFERENCE MARK 1 IS 4.00 FEET NORTHEAST OF THE STATION.
AC4311'
AC4311'REFERENCE MARK 2 IS 4.00 FEET NORTHWEST OF THE STATION.
AC4311'
AC4311'AZIMUTH MARK IS A SPIKE, CENTER PUNCHED AND DRIVEN THROUGH A DADE
AC4311'COUNTY BRASS WASHER INTO THE ASPHALT PAVING ON THE EAST EDGE OF
AC4311'S.W. 137TH AVENUE, 0.5 MILE NORTH OF THE STATION.  IT IS 6.00 FEET
AC4311'EAST OF A STEEL PIPE IN A 10 INCH CONCRETE MONUMENT, SCRIBED 22
AC4311'AND 23 WHICH MARKS THE QUARTER CORNER COMMON TO SECTIONS 22 AND 23
AC4311'OF TOWNSHIP 57 SOUTH, RANGE 39 EAST.
AC4311
AC4311                          STATION RECOVERY (1995)
AC4311
AC4311'RECOVERY NOTE BY US POWER SQUADRON 1995
AC4311'RECOVERED IN GOOD CONDITION.
AC4311
AC4311                          STATION RECOVERY (2005)
AC4311
```

AC4311'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2005 (WJR)
AC4311'FOUND STATION MARK ELEVATION TO BE 1.65M OR 5.41' NGVD'29 DATUM. USED
AC4311'MIAMI-DADE COUNTY PWD BM - 8 E-S, ELEV. 6.47' NGVD'29, USGS BRASS DISC
AC4311'IN WEST END OF SOUTH CONC BRIDGE, 15' W/O SW 137 AVE, 37' N/O SW 344
AC4311'ST.

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

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

```
PROGRAM = datasheet95, VERSION = 8.8

*** NOTE - The station below is destroyed.

1        National Geodetic Survey,   Retrieval Date = NOVEMBER 28, 2015
 AC4251 ***********************************************************************
 AC4251  DESIGNATION -  H 098
 AC4251  PID         -  AC4251
 AC4251  STATE/COUNTY-  FL/MIAMI-DADE
 AC4251  COUNTRY     -  US
 AC4251  USGS QUAD   -  ARSENICKER KEYS (1997)
 AC4251
 AC4251                        *CURRENT SURVEY CONTROL
 AC4251  ______________________________________________________________________
 AC4251* NAD 83(1990) POSITION- 25 28 56.73273(N) 080 22 17.84087(W)    ADJUSTED
 AC4251* NAVD 88 ORTHO HEIGHT -     4.     (meters)       13.     (feet) SCALED
 AC4251  ______________________________________________________________________
 AC4251  GEOID HEIGHT    -        -25.272 (meters)                      GEOID12B
 AC4251  LAPLACE CORR    -         -3.41  (seconds)                     DEFLEC12B
 AC4251  HORZ ORDER      -  SECOND
 AC4251
 AC4251.The horizontal coordinates were established by classical geodetic methods
 AC4251.and adjusted by the National Geodetic Survey in May 1991.
 AC4251.
 AC4251.The orthometric height was scaled from a topographic map.
 AC4251
 AC4251.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC4251.GEOID12B height accuracy estimate available here.
 AC4251
 AC4251.The Laplace correction was computed from DEFLEC12B derived deflections.
 AC4251
 AC4251. The following values were computed from the NAD 83(1990) position.
 AC4251
 AC4251;                    North         East     Units Scale Factor Converg.
 AC4251;SPC FL E     -   127,428.316   263,181.923   MT  0.99999045   +0 16 13.3
 AC4251;SPC FL E     -   418,071.07    863,456.03   sFT  0.99999045   +0 16 13.3
 AC4251;UTM  17      - 2,818,516.820   563,160.366   MT  0.99964926   +0 16 13.3
 AC4251
 AC4251!             -  Elev Factor  x  Scale Factor =   Combined Factor
 AC4251!SPC FL E     -   1.00000342  x   0.99999045  =   0.99999387
 AC4251!UTM  17      -   1.00000342  x   0.99964926  =   0.99965267
 AC4251
 AC4251:                Primary Azimuth Mark                    Grid Az
 AC4251:SPC FL E     -  H 098 AZ MK                             359 39 37.1
 AC4251:UTM  17      -  H 098 AZ MK                             359 39 37.1
 AC4251
 AC4251|-----------------------------------------------------------------------|
 AC4251| PID    Reference Object                    Distance      Geod. Az   |
 AC4251|                                                          dddmmss.s |
 AC4251| AC4328 LEISURE CITY TANK                APPROX. 5.1 KM 2884437.3 |
 AC4251| AC4326 HOMESTEAD AFB SOUTH TANK BCN     APPROX. 2.3 KM 3120314.4 |
 AC4251| CW7630 H 098 AZ MK                                     3595550.4 |
 AC4251|-----------------------------------------------------------------------|
 AC4251
 AC4251                         SUPERSEDED SURVEY CONTROL
 AC4251
 AC4251  NAD 83(1986)-  25 28 56.73309(N)    080 22 17.83961(W) AD(       ) 2
```

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AC4251  NAD 27      -  25 28 55.33578(N)    080 22 18.64589(W) AD(       ) 2
AC4251
AC4251.Superseded values are not recommended for survey control.
AC4251
AC4251.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AC4251.See file dsdata.txt to determine how the superseded data were derived.
AC4251
AC4251_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ6316018516(NAD 83)
AC4251
AC4251_MARKER: DD = SURVEY DISK
AC4251_SETTING: 0 = UNSPECIFIED SETTING
AC4251_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AC4251+SATELLITE: SATELLITE OBSERVATIONS - August 24, 2005
AC4251
AC4251  HISTORY     - Date     Condition        Report By
AC4251  HISTORY     - 1972     MONUMENTED       FL-025
AC4251  HISTORY     - 20050824 GOOD             WEIDEN
AC4251  HISTORY     - 20110216 DESTROYED        NGS
AC4251
AC4251                          STATION DESCRIPTION
AC4251
AC4251'DESCRIBED BY DADE COUNTY FLORIDA 1972 (JCF)
AC4251'STATION IS ABOUT 2.0 MILES WEST OF THE SHORE OF BISCAYNE BAY, ABOUT
AC4251'6.7 MILES EAST OF THE HOMESTEAD CITY HALL, ABOUT 0.5 MILE SOUTH OF
AC4251'THE HOMESTEAD AIR FORCE BASE SEWAGE DISPOSAL PLANT AND ABOUT 0.2
AC4251'MILE SOUTH OF THE CENTER OF SECTION 7, TOWNSHIP 57 SOUTH, RANGE 40
AC4251'EAST.
AC4251'
AC4251'TO REACH FROM THE GATE AT THE NORTHEAST CORNER OF THE LIVING AREA
AC4251'OF HOMESTEAD AIR FORCE BASE AT THE INTERSECTION OF S.W. 122ND AVENUE
AC4251'AND S.W. 268TH STREET (MOODY DRIVE), PROCEED EAST ON S.W. 268TH
AC4251'STREET FOR 1.5 MILES TO THE INTERSECTION OF S.W. 107TH AVENUE,
AC4251'TURN RIGHT AND PROCEED SOUTH ON S.W. 107TH AVENUE FOR 2.25 MILES
AC4251'TO THE INTERSECTION OF S.W. 304TH STREET (KINGS HIGHWAY), TURN
AC4251'RIGHT AND PROCEED WEST ON S.W. 304TH STREET FOR 0.5 MILE TO THE
AC4251'INTERSECTION OF S.W. 112TH AVENUE (ALLAPATTAH DRIVE), TURN LEFT
AC4251'AND PROCEED SOUTH ON S.W. 112TH AVENUE OF 0.2 MILE TO THE STATION
AC4251'ON THE RIGHT ON THE WEST SHOULDER OF THE ROADWAY ABOUT 0.05 MILE
AC4251'NORTH OF THE CENTER OF THE NORTHERLY OF TWO CONCRETE BOX CULVERTS
AC4251'PASSING UNDER S.W. 112TH AVENUE.
AC4251'
AC4251'STATION MARK IS A BRASS DISK IN A CONCRETE MONUMENT WITH
AC4251'UNDERGROUND MARK, FLUSH WITH THE SHOULDER OF THE ROAD, MARKED
AC4251'FLORIDA-DADE AND STAMPED H-098.  IT IS 5.0 FEET WEST OF THE WEST
AC4251'EDGE OF PAVING ON S.W. 112TH AVENUE AND 224.5 FEET NORTH OF THE
AC4251'CENTER OF THE NORTHERLY OF 2 CONCRETE BOX CULVERTS PASSING UNDER
AC4251'S.W. 112TH AVENUE.
AC4251'
AC4251'REFERENCE MARKS ARE SPIKES, CENTER PUNCHED AND DRIVEN THROUGH DADE
AC4251'COUNTY BRASS WASHERS INTO THE ASPHALT PAVING OF S.W. 112TH AVENUE.
AC4251'
AC4251'REFERENCE MARK 1 IS 7.00 FEET NORTHEAST OF THE STATION.
AC4251'
AC4251'REFERENCE MARK 2 IS 7.00 FEET SOUTHEAST OF THE STATION AND THE
AC4251'DISTANCE BETWEEN THE REFERENCE MARKS IS 9.04 FEET.
AC4251'
AC4251'AZIMUTH MARK IS A BRASS PLUG IN A STEEL PIPE DRIVEN FLUSH WITH THE
AC4251'ASPHALT PAVING 0.45 MILE NORTH OF THE STATION.  IT IS ON THE
AC4251'APPROACH TO A TIMBER BRIDGE OVER A CANAL ADJACENT TO A SEWAGE
AC4251'DISPOSAL PLAT, 17.8 FEET SOUTH OF THE SOUTH EDGE OF THE BRIDGE AND
AC4251'9.3 FEET EAST OF THE WEST EDGE OF THE BRIDGE.
AC4251
AC4251                          STATION RECOVERY (2005)
AC4251
AC4251'RECOVERY NOTE BY WEIDENER SURVEYING AND MAPPING 2005
AC4251'RECOVERED IN GOOD CONDITION.
```

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AC4251
AC4251                          STATION RECOVERY (2011)
AC4251
AC4251'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2011
AC4251'THIS REPORT WAS SUBMITTED BY JOSEPH M. LAKNER.

*** retrieval complete.
Elapsed Time = 00:00:02
```

The NGS Data Sheet

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

```
PROGRAM = datasheet95, VERSION = 8.8

 *** retrieval complete.
 Elapsed Time = 00:00:02
Msg=FATAL_ERROR - No Marks found


 ------------------------------------------------------------------------
 -   This listing contains control for which complete digital           -
 -   data sheets where not provided.  The complete data sheets were     -
 -   not provided for the reason listed below.  The reason below is     -
 -   associated with a horizontal control Nonpub code shown under       -
 -   the heading 'H' and/or a vertical control Nonpub code shown under  -
 -   the heading 'v'                                                    -
 -                                                                      -
 -   The format of the records are as follows:                          -
 -       Pid  = Station Permanent Identifier)                           -
 -       Name = Station Designation                                     -
 -       Lat  = Approx. Latitude (Degrees, Minutes, truncated Seconds)  -
 -       Lon  = Approx. Longitude (Degrees, Minutes, truncated Seconds) -
 -       O    = Horizontal Order                                        -
 -       o    = Vertical Order                                          -
 -       H    = Horizontal Nonpub Code                                  -
 -       v    = Vertical Nonpub Code                                    -
 -                                                                      -
 -       H Nonpub HORIZONTAL CONTROL NONPUB REASON                      -
 -       -------- --------------------------------                      -
 -       B        Station is a RBN antenna                              -
 -       C        Not a publishable datum within the state              -
 -       D        No descriptive text available                         -
 -       I        No NAD83 coordinates available, only IGS08 coordinates-
 -       L        CORS L1 Phase Center is not publishable               -
 -       N        No geodetic control                                   -
 -       O        Outside NGS publication area                          -
 -       P        Purpose of position is not for network control        -
 -       R        Restricted position                                   -
 -       T        Station is a temporary point/bench mark               -
 -       V        Station is a VOR antenna                              -
 -       W        Weakly determined position                            -
 -       X        Surface mark reported destroyed                       -
 -       Y        Surface and underground mark reported destroyed       -
                                                                        -
 -       v Nonpub VERTICAL CONTROL NONPUB REASON                        -
 -       -------- ------------------------------                        -
 -       C        Not a publishable datum within the state              -
 -       D        No descriptive text available                         -
 -       F        Bench mark not yet adjusted                           -
 -       N        No geodetic control                                   -
 -       L        CORS L1 Phase Center is not publishable               -
 -       O        Outside NGS publication area                          -
 -       R        Restricted elevation                                  -
 -       S        Mark is in a subsidence area                          -
 -       T        Station is a temporary point/bench mark               -
 -       X        Surface mark reported destroyed                       -
 -       Y        Surface and underground mark reported destroyed       -
 -       Z        Presumed destroyed                                    -
 -                                                                      -
```

```
-                                                                              -
-   NOTE - Stations found in this listing may still have a valid               -
-          datasheet produced by use of other publishable values.              -
-          For example, an ADJUSTED height may be non-publishable              -
-          but a good GPS height might be found on the datasheet.              -
-          This listing does not imply that values found on the datasheet      -
-          are restricted.  If it's on the datasheet, use it.                  -
-                                                                              -
--------------------------------------------------------------------------------
 Pid    Name                            Lat         Lon         Elev      O o Hv
 ------ ------------------------------ ---------- ----------- --------- - - --
>AC4251 H 098                          25 28 56.7/080 22 17.8           2   XX
```

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 28, 2015
 AC2018 ***********************************************************************
 AC2018  DESIGNATION -  R 722
 AC2018  PID         -  AC2018
 AC2018  STATE/COUNTY-  FL/MIAMI-DADE
 AC2018  COUNTRY     -  US
 AC2018  USGS QUAD   -  PERRINE (1994)
 AC2018
 AC2018                        *CURRENT SURVEY CONTROL
 AC2018 ______________________________________________________________________
 AC2018* NAD 83(1986) POSITION- 25 31 07.      (N) 080 20 50.      (W)    SCALED
 AC2018* NAVD 88 ORTHO HEIGHT -      1.624  (meters)         5.33   (feet) ADJUSTED
 AC2018 ______________________________________________________________________
 AC2018  GEOID HEIGHT    -        -25.363  (meters)                       GEOID12B
 AC2018  DYNAMIC HEIGHT  -          1.621  (meters)         5.32   (feet) COMP
 AC2018  MODELED GRAVITY -    978,980.0    (mgal)                         NAVD 88
 AC2018
 AC2018  VERT ORDER      -  SECOND    CLASS 0
 AC2018
 AC2018.The horizontal coordinates were scaled from a topographic map and have
 AC2018.an estimated accuracy of +/- 6 seconds.
 AC2018.
 AC2018.The orthometric height was determined by differential leveling and
 AC2018.adjusted by the NATIONAL GEODETIC SURVEY
 AC2018.in June 1991.
 AC2018
 AC2018.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC2018.GEOID12B height accuracy estimate available here.
 AC2018
 AC2018.The dynamic height is computed by dividing the NAVD 88
 AC2018.geopotential number by the normal gravity value computed on the
 AC2018.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC2018.degrees latitude (g = 980.6199 gals.).
 AC2018
 AC2018.The modeled gravity was interpolated from observed gravity values.
 AC2018
 AC2018;                    North         East     Units  Estimated Accuracy
 AC2018;SPC FL E     -   131,450.      265,620.      MT  (+/- 180 meters Scaled)
 AC2018
 AC2018                          SUPERSEDED SURVEY CONTROL
 AC2018
 AC2018  NGVD 29 (??/??/92)    2.089  (m)             6.85   (f) ADJ UNCH    2 0
 AC2018
 AC2018.Superseded values are not recommended for survey control.
 AC2018
 AC2018.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC2018.See file dsdata.txt to determine how the superseded data were derived.
 AC2018
 AC2018_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ655225(NAD 83)
 AC2018
 AC2018_MARKER: Z = SEE DESCRIPTION
 AC2018_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 AC2018_SP_SET: ABUTMENT
 AC2018_STAMPING: R 722 DC BM
 AC2018_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AC2018_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
```

```
AC2018+SATELLITE: SATELLITE OBSERVATIONS - May 03, 2010
AC2018
AC2018  HISTORY     - Date     Condition        Report By
AC2018  HISTORY     - UNK      MONUMENTED       FL-025
AC2018  HISTORY     - 1970     GOOD             NGS
AC2018  HISTORY     - 1987     GOOD             USPSQD
AC2018  HISTORY     - 1989     GOOD             USPSQD
AC2018  HISTORY     - 20100503 GOOD             GPI
AC2018  HISTORY     - 20150410 GOOD             WANTGP
AC2018
AC2018                          STATION DESCRIPTION
AC2018
AC2018'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC2018'5.4 MI SE FROM PRINCETON.
AC2018'ABOUT 4.0 MILES EAST ALONG COCONUT PALM DRIVE FROM THE INTERSECTION
AC2018'OF U.S. HIGHWAY 1 AT PRINCETON, THENCE 1.35 MILES SOUTH ALONG
AC2018'A GRAVELED ROAD, SET ON THE TOP OF THE WEST END OF THE NORTH
AC2018'CONCRETE ABUTMENT FOR A LARGE FLOOD CONTROL GATE, ABOUT IN LINE
AC2018'WITH THE EXTENDED LINE OF MOODY DRIVE LEADING WESTERLY, 1.2 FEET
AC2018'WEST OF A HIGH HURRICANE FENCE AROUND THE FLOOD GATES, 30.5 FEET
AC2018'SOUTH OF THE SOUTH GATE POST AT NORTH ENTRANCE TO GATES, 2.2 FEET
AC2018'EAST OF THE WEST END OF THE ABUTMENT AND ABOUT LEVEL WITH THE
AC2018'FLOORING ACROSS FLOOD GATES.  IN SECTION 32 OR 33, R 40 E, T 56 S.
AC2018
AC2018                          STATION RECOVERY (1987)
AC2018
AC2018'RECOVERY NOTE BY US POWER SQUADRON 1987 (LEM)
AC2018'RECOVERED IN GOOD CONDITION.
AC2018
AC2018                          STATION RECOVERY (1989)
AC2018
AC2018'RECOVERY NOTE BY US POWER SQUADRON 1989 (TD)
AC2018'RECOVERED IN GOOD CONDITION.
AC2018
AC2018                          STATION RECOVERY (2010)
AC2018
AC2018'RECOVERY NOTE BY GREENMAN PEDERSEN INCORPORATED 2010 (KAW)
AC2018'RECOVERED IN GOOD CONDITION.
AC2018
AC2018                          STATION RECOVERY (2015)
AC2018
AC2018'RECOVERY NOTE BY WANTMAN GROUP INC 2015 (JM)
AC2018'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02
```

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 25, 2015
 AC1181 ***********************************************************************
 AC1181  DESIGNATION -  R 724
 AC1181  PID         -  AC1181
 AC1181  STATE/COUNTY-  FL/MIAMI-DADE
 AC1181  COUNTRY     -  US
 AC1181  USGS QUAD   -  ARSENICKER KEYS (1997)
 AC1181
 AC1181                        *CURRENT SURVEY CONTROL
 AC1181  ______________________________________________________________________
 AC1181* NAD 83(1986) POSITION- 25 29 21.     (N) 080 20 48.      (W)    SCALED
 AC1181* NAVD 88 ORTHO HEIGHT -     1.624  (meters)         5.33   (feet) ADJUSTED
 AC1181  ______________________________________________________________________
 AC1181  GEOID HEIGHT    -        -25.363  (meters)                       GEOID12B
 AC1181  DYNAMIC HEIGHT  -          1.621  (meters)         5.32   (feet) COMP
 AC1181  MODELED GRAVITY -    978,971.0    (mgal)                         NAVD 88
 AC1181
 AC1181  VERT ORDER      -  SECOND    CLASS 0
 AC1181
 AC1181.The horizontal coordinates were scaled from a topographic map and have
 AC1181.an estimated accuracy of +/- 6 seconds.
 AC1181.
 AC1181.The orthometric height was determined by differential leveling and
 AC1181.adjusted by the NATIONAL GEODETIC SURVEY
 AC1181.in June 1991.
 AC1181
 AC1181.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC1181.GEOID12B height accuracy estimate available here.
 AC1181
 AC1181.The dynamic height is computed by dividing the NAVD 88
 AC1181.geopotential number by the normal gravity value computed on the
 AC1181.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC1181.degrees latitude (g = 980.6199 gals.).
 AC1181
 AC1181.The modeled gravity was interpolated from observed gravity values.
 AC1181
 AC1181;                    North         East     Units  Estimated Accuracy
 AC1181;SPC FL E     -   128,190.      265,690.      MT  (+/- 180 meters Scaled)
 AC1181
 AC1181                          SUPERSEDED SURVEY CONTROL
 AC1181
 AC1181  NGVD 29 (??/??/92)    2.089  (m)             6.85   (f) ADJ UNCH    2 0
 AC1181
 AC1181.Superseded values are not recommended for survey control.
 AC1181
 AC1181.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC1181.See file dsdata.txt to determine how the superseded data were derived.
 AC1181
 AC1181_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ656192(NAD 83)
 AC1181
 AC1181_MARKER: Z = SEE DESCRIPTION
 AC1181_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 AC1181_SP_SET: BRIDGE ABUTMENT
 AC1181_STAMPING: R 724 DC
 AC1181_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AC1181_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
```

AC1181+SATELLITE: SATELLITE OBSERVATIONS - May 03, 2010
AC1181
AC1181 HISTORY   - Date   Condition   Report By
AC1181 HISTORY   - UNK   MONUMENTED   FL-025
AC1181 HISTORY   - 1970   GOOD   NGS
AC1181 HISTORY   - 20050824 GOOD   WEIDEN
AC1181 HISTORY   - 20100503 GOOD   GPI
AC1181 HISTORY   - 20150410 GOOD   WANTGP
AC1181
AC1181   STATION DESCRIPTION
AC1181
AC1181'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC1181'7.4 MI SE FROM PRINCETON.
AC1181'ABOUT 4.0 MILES EAST ALONG COCONUT PALM DRIVE FROM THE
AC1181'INTERSECTION OF U.S. HIGHWAY 1 AT PRINCETON, THENCE 3.4 MILES
AC1181'SOUTH ALONG A GRAVELED ROAD SET ON THE TOP OF THE NORTH ABUTMENT
AC1181'FOR THE FLOOD CONTROL GATE ACROSS MILITARY CANAL, 26 FEET SOUTH
AC1181'OF THE NORTHWEST CORNER OF THE HURRICANE FENCE AROUND THE FLOOD
AC1181'CONTROL GATE, 2.4 FEET EAST OF THE WEST END OF THE ABUTMENT,
AC1181'1.8 FEET WEST OF THE WEST FENCE LINE AROUND THE GATE AND LEVEL
AC1181'WITH THE GROUND.
AC1181
AC1181   STATION RECOVERY (2005)
AC1181
AC1181'RECOVERY NOTE BY WEIDENER SURVEYING AND MAPPING 2005
AC1181'RECOVERED IN GOOD CONDITION.
AC1181
AC1181   STATION RECOVERY (2010)
AC1181
AC1181'RECOVERY NOTE BY GREENMAN PEDERSEN INCORPORATED 2010 (KAW)
AC1181'RECOVERED IN GOOD CONDITION.
AC1181
AC1181   STATION RECOVERY (2015)
AC1181
AC1181'RECOVERY NOTE BY WANTMAN GROUP INC 2015 (JM)
AC1181'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02

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 25, 2015
 AC1180 ***********************************************************************
 AC1180  DESIGNATION -  R 725
 AC1180  PID         -  AC1180
 AC1180  STATE/COUNTY-  FL/MIAMI-DADE
 AC1180  COUNTRY     -  US
 AC1180  USGS QUAD   -  ARSENICKER KEYS (1997)
 AC1180
 AC1180                        *CURRENT SURVEY CONTROL
 AC1180
 AC1180* NAD 83(1986) POSITION- 25 28 13.     (N) 080 20 49.     (W)    SCALED
 AC1180* NAVD 88 ORTHO HEIGHT -     1.603 (meters)        5.26  (feet) ADJUSTED
 AC1180
 AC1180  GEOID HEIGHT    -        -25.347 (meters)                      GEOID12B
 AC1180  DYNAMIC HEIGHT  -          1.600 (meters)        5.25  (feet) COMP
 AC1180  MODELED GRAVITY -    978,967.4   (mgal)                        NAVD 88
 AC1180
 AC1180  VERT ORDER      -  SECOND    CLASS 0
 AC1180
 AC1180.The horizontal coordinates were scaled from a topographic map and have
 AC1180.an estimated accuracy of +/- 6 seconds.
 AC1180.
 AC1180.The orthometric height was determined by differential leveling and
 AC1180.adjusted by the NATIONAL GEODETIC SURVEY
 AC1180.in June 1991.
 AC1180
 AC1180.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC1180.GEOID12B height accuracy estimate available here.
 AC1180
 AC1180.The dynamic height is computed by dividing the NAVD 88
 AC1180.geopotential number by the normal gravity value computed on the
 AC1180.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC1180.degrees latitude (g = 980.6199 gals.).
 AC1180
 AC1180.The modeled gravity was interpolated from observed gravity values.
 AC1180
 AC1180;                    North         East     Units  Estimated Accuracy
 AC1180;SPC FL E     -   126,100.      265,670.      MT  (+/- 180 meters Scaled)
 AC1180
 AC1180                          SUPERSEDED SURVEY CONTROL
 AC1180
 AC1180  NGVD 29 (??/??/92)    2.068   (m)             6.78    (f) ADJ UNCH    2 0
 AC1180
 AC1180.Superseded values are not recommended for survey control.
 AC1180
 AC1180.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC1180.See file dsdata.txt to determine how the superseded data were derived.
 AC1180
 AC1180_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ656171(NAD 83)
 AC1180
 AC1180_MARKER: Z = SEE DESCRIPTION
 AC1180_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 AC1180_SP_SET: BRIDGE ABUTMENT
 AC1180_STAMPING: R 725 DC
 AC1180_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AC1180_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
```

```
AC1180+SATELLITE: SATELLITE OBSERVATIONS - May 03, 2010
AC1180
AC1180  HISTORY     - Date     Condition        Report By
AC1180  HISTORY     - UNK      MONUMENTED       FL-025
AC1180  HISTORY     - 1970     GOOD             NGS
AC1180  HISTORY     - 1989     GOOD             USPSQD
AC1180  HISTORY     - 19901230 GOOD             USPSQD
AC1180  HISTORY     - 20050824 GOOD             WEIDEN
AC1180  HISTORY     - 20060901 GOOD             INHURC
AC1180  HISTORY     - 20100503 GOOD             GPI
AC1180  HISTORY     - 20150410 GOOD             WANTGP
AC1180
AC1180                          STATION DESCRIPTION
AC1180
AC1180'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC1180'8.7 MI SE FROM PRINCETON.
AC1180'ABOUT 4.0 MILES EAST ALONG COCONUT PALM DRIVE FROM THE
AC1180'INTERSECTION OF U.S. HIGHWAY 1 AT PRINCETON, THENCE 4.7 MILES
AC1180'SOUTH ALONG A GRAVELED ROAD, SET ON THE TOP OF THE WEST END OF
AC1180'THE SOUTH CONCRETE ABUTMENT FOR THE FLOOD CONTROL GATES OVER
AC1180'MOWRY CANAL, 2.3 FEET NORTHWEST OF THE SOUTHWEST CORNER OF THE
AC1180'HURRICANE FENCE AROUND THE GATES, 2.3 FEET EAST OF THE WEST
AC1180'END OF THE ABUTMENT, 18 1/2 FEET WEST OF THE CENTER LINE OF A
AC1180'ROAD AT SOUTH ENTRANCE TO GATES FOR FLOOD CONTROL GATES AND LEVEL
AC1180'WITH THE GROUND.
AC1180
AC1180                          STATION RECOVERY (1989)
AC1180
AC1180'RECOVERY NOTE BY US POWER SQUADRON 1989 (TD)
AC1180'RECOVERED IN GOOD CONDITION.
AC1180
AC1180                          STATION RECOVERY (1990)
AC1180
AC1180'RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC1180'RECOVERED IN GOOD CONDITION.
AC1180
AC1180                          STATION RECOVERY (2005)
AC1180
AC1180'RECOVERY NOTE BY WEIDENER SURVEYING AND MAPPING 2005
AC1180'RECOVERED IN GOOD CONDITION.
AC1180
AC1180                          STATION RECOVERY (2006)
AC1180
AC1180'RECOVERY NOTE BY INTERNATIONAL HURRICANE CENTER 2006 (WRV)
AC1180'RECOVERED IN GOOD CONDITION.
AC1180
AC1180                          STATION RECOVERY (2010)
AC1180
AC1180'RECOVERY NOTE BY GREENMAN PEDERSEN INCORPORATED 2010 (KAW)
AC1180'RECOVERED IN GOOD CONDITION.
AC1180
AC1180                          STATION RECOVERY (2015)
AC1180
AC1180'RECOVERY NOTE BY WANTMAN GROUP INC 2015 (JM)
AC1180'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:03
```

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 25, 2015
 AC1165 ***********************************************************************
 AC1165  DESIGNATION -  V 314
 AC1165  PID         -  AC1165
 AC1165  STATE/COUNTY-  FL/MIAMI-DADE
 AC1165  COUNTRY     -  US
 AC1165  USGS QUAD   -  HOMESTEAD (1994)
 AC1165
 AC1165                        *CURRENT SURVEY CONTROL
 AC1165  ______________________________________________________________________
 AC1165* NAD 83(1986) POSITION- 25 26 53.     (N) 080 24 13.      (W)    SCALED
 AC1165* NAVD 88 ORTHO HEIGHT -     1.882  (meters)        6.17   (feet) ADJUSTED
 AC1165  ______________________________________________________________________
 AC1165  GEOID HEIGHT    -        -25.126  (meters)                      GEOID12B
 AC1165  DYNAMIC HEIGHT  -          1.879  (meters)        6.16   (feet) COMP
 AC1165  MODELED GRAVITY -    978,970.6    (mgal)                        NAVD 88
 AC1165
 AC1165  VERT ORDER      -  SECOND    CLASS 0
 AC1165
 AC1165.The horizontal coordinates were scaled from a topographic map and have
 AC1165.an estimated accuracy of +/- 6 seconds.
 AC1165.
 AC1165.The orthometric height was determined by differential leveling and
 AC1165.adjusted by the NATIONAL GEODETIC SURVEY
 AC1165.in June 1991.
 AC1165
 AC1165.Significant digits in the geoid height do not necessarily reflect accuracy.
 AC1165.GEOID12B height accuracy estimate available here.
 AC1165
 AC1165.The dynamic height is computed by dividing the NAVD 88
 AC1165.geopotential number by the normal gravity value computed on the
 AC1165.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AC1165.degrees latitude (g = 980.6199 gals.).
 AC1165
 AC1165.The modeled gravity was interpolated from observed gravity values.
 AC1165
 AC1165;                    North         East     Units  Estimated Accuracy
 AC1165;SPC FL E     -   123,610.      259,980.      MT  (+/- 180 meters Scaled)
 AC1165
 AC1165                          SUPERSEDED SURVEY CONTROL
 AC1165
 AC1165  NGVD 29 (??/??/92)    2.348   (m)             7.70    (f) ADJ UNCH    2 0
 AC1165
 AC1165.Superseded values are not recommended for survey control.
 AC1165
 AC1165.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AC1165.See file dsdata.txt to determine how the superseded data were derived.
 AC1165
 AC1165_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ599146(NAD 83)
 AC1165
 AC1165_MARKER: DB = BENCH MARK DISK
 AC1165_SETTING: 30 = SET IN A LIGHT STRUCTURE
 AC1165_SP_SET: CONCRETE BLOCK
 AC1165_STAMPING: V 314 1970
 AC1165_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
 AC1165
```

```
AC1165  HISTORY     - Date     Condition        Report By
AC1165  HISTORY     - 1970     MONUMENTED       NGS
AC1165  HISTORY     - 1982     GOOD             LOCSUR
AC1165  HISTORY     - 1987     GOOD             USPSQD
AC1165  HISTORY     - 1987     GOOD             USPSQD
AC1165  HISTORY     - 1988     GOOD             USPSQD
AC1165  HISTORY     - 1989     GOOD             USPSQD
AC1165  HISTORY     - 19901230 GOOD             USPSQD
AC1165  HISTORY     - 19950910 GOOD             USPSQD
AC1165
AC1165                          STATION DESCRIPTION
AC1165
AC1165'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
AC1165'4.4 MI E FROM FLORIDA CITY.
AC1165'ABOUT 4.4 MILES EAST ALONG PALM DRIVE FROM THE INTERSECTION OF
AC1165'U.S. HIGHWAY 1 AT FLORIDA CITY, AT THE SOUTHWEST CORNER OF A
AC1165'BRIDGE OVER THE FLORIDA CITY CANAL, BETWEEN THE TWO LANES OF
AC1165'PALM DRIVE, SET IN THE TOP OF A CONCRETE BLOCK WHICH IS 8 1/2
AC1165'FEET LONG-5 FEET WIDE AND 4 FEET HIGH AND SET ON A LONG BLOCK OF
AC1165'CONCRETE, 39.7 FEET NORTH OF THE CENTER LINE OF THE SOUTH LANE
AC1165'OF PALM DRIVE AND ABOUT LEVEL WITH PALM DRIVE.
AC1165
AC1165                          STATION RECOVERY (1982)
AC1165
AC1165'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1982
AC1165'RECOVERED IN GOOD CONDITION.
AC1165
AC1165                          STATION RECOVERY (1987)
AC1165
AC1165'RECOVERY NOTE BY US POWER SQUADRON 1987 (TD)
AC1165'RECOVERED IN GOOD CONDITION.
AC1165
AC1165                          STATION RECOVERY (1987)
AC1165
AC1165'RECOVERY NOTE BY US POWER SQUADRON 1987 (LEM)
AC1165'RECOVERED IN GOOD CONDITION.
AC1165
AC1165                          STATION RECOVERY (1988)
AC1165
AC1165'RECOVERY NOTE BY US POWER SQUADRON 1988 (TD)
AC1165'RECOVERED IN GOOD CONDITION.
AC1165
AC1165                          STATION RECOVERY (1989)
AC1165
AC1165'RECOVERY NOTE BY US POWER SQUADRON 1989 (TD)
AC1165'RECOVERED IN GOOD CONDITION.
AC1165
AC1165                          STATION RECOVERY (1990)
AC1165
AC1165'RECOVERY NOTE BY US POWER SQUADRON 1990 (LEM)
AC1165'RECOVERED IN GOOD CONDITION.
AC1165
AC1165                          STATION RECOVERY (1995)
AC1165
AC1165'RECOVERY NOTE BY US POWER SQUADRON 1995
AC1165'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02
```

JOB# 1804-C **PARTY CHIEF** **SH** **DATE:** **July 6, 2005** **FIELD BOOK** **Various** **PAGE**

STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	5.957											
CD 18 2	5.059	5.059	19.699				**14.640**		**NAVD88**			
DADE CO	4.161											
	15.177											
		179.600										
	7.110			7.117								
TP-1	6.224	6.224	19.693	6.230	6.230	13.469		357.00	0.000494163	0.000494163	**13.469**	4.105
	5.338			5.343								
	18.672			18.690								
		177.200			177.400							
	5.703			7.110								
TP-2	4.478	4.478	17.947	6.224	6.224	13.469		354.40	0.000490564	0.000490564	**13.469**	4.105
	3.253			5.338								
	13.434			18.672								
		245.000			177.200							
	5.786			6.922								
TP-3	4.562	4.562	16.867	5.642	5.642	12.305		501.00	0.000693489	0.000693489	**12.304**	3.750
	3.338			4.362								
	13.686			16.926								
		244.800			256.000							
	5.193			6.794								
TP-4	3.986	3.986	15.244	5.609	5.609	11.258		481.80	0.000666912	0.000666912	**11.257**	3.431
	2.779			4.424								
	11.958			16.827								
		241.400			237.000							
	5.852			6.345								
TP-5	4.590	4.590	14.754	5.080	5.080	10.164		494.40	0.000684354	0.000684354	**10.163**	3.098
	3.328			3.815								
	13.770			15.240								
		252.400			253.000							
	5.851			6.386								
TP-6	4.637	4.637	14.236	5.155	5.155	9.599		498.60	0.000690167	0.000690167	**9.598**	2.926
	3.423			3.924								

JOB# 1804-C **PARTY CHIEF** **SH** **DATE:** **July 6, 2005** **FIELD BOOK** **Various** **PAGE**

STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	13.911			15.465								
		242.800			246.200							
	5.919			5.667								
TP-7	4.696	4.696	14.548	4.384	4.384	9.852		499.40	0.000691275	0.000691275	**9.851**	3.003
	3.473			3.101								
	14.088			13.152								
		244.600			256.600							
	5.910			5.430								
TP-8	4.651	4.651	15.011	4.188	4.188	10.360		493.00	0.000682416	0.000682416	**10.359**	3.158
	3.392			2.946								
	13.953			12.564								
		251.800			248.400							
	6.410			5.722								
TP-9	5.173	5.173	15.726	4.458	4.458	10.553		504.60	0.000698472	0.000698472	**10.552**	3.216
	3.936			3.194								
	15.519			13.374								
		247.400			252.800							
	6.227			6.160								
TP-10	4.898	4.898	15.712	4.912	4.912	10.814		497.00	0.000687952	0.000687952	**10.813**	3.296
	3.569			3.664								
	14.694			14.736								
		265.800			249.600							
	6.387			5.727								
TP-11	5.157	5.157	16.450	4.419	4.419	11.293		527.40	0.000730032	0.000730032	**11.292**	3.442
	3.927			3.111								
	15.471			13.257								
		246.000			261.600							
	5.260			5.752								
TP-12	4.029	4.029	15.986	4.493	4.493	11.957		497.80	0.000689060	0.000689060	**11.956**	3.644
	2.798			3.234								
	12.087			13.479								
		246.200			251.800							

JOB# 1804-C **PARTY CHIEF** **SH** **DATE:** **July 6, 2005** **FIELD BOOK** **Various** **PAGE**

STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	5.631			5.756								
TP-13	4.376	4.376	15.849	4.513	4.513	11.473		494.80	0.000684907	0.000684907	**11.472**	3.497
	3.121			3.270								
	13.128			13.539								
		251.000			248.600							
	6.188			5.835								
TP-14	4.946	4.946	16.235	4.560	4.560	11.289		506.00	0.000700410	0.000700410	**11.288**	3.441
	3.704			3.285								
	14.838			13.680								
		248.400			255.000							
	6.081			5.804								
TP-15	4.834	4.834	16.554	4.515	4.515	11.720		506.20	0.000700687	0.000700687	**11.719**	3.572
	3.587			3.226								
	14.502			13.545								
		249.400			257.800							
	5.434			6.143								
TP-16	4.197	4.197	15.872	4.879	4.879	11.675		502.20	0.000695150	0.000695150	**11.674**	3.558
	2.960			3.615								
	12.591			14.637								
		247.400			252.800							
	5.681			6.276								
TP-17	4.447	4.447	15.301	5.018	5.018	10.854		499.00	0.000690721	0.000690721	**10.853**	3.308
	3.213			3.760								
	13.341			15.054								
		246.800			251.600							
	6.445			5.896								
TP-18	5.184	5.184	15.857	4.628	4.628	10.673		500.40	0.000692659	0.000692659	**10.672**	3.253
	3.923			3.360								
	15.552			13.884								
		252.200			253.600							
	4.852			6.627								
TP-19	3.587	3.587	14.075	5.369	5.369	10.488		503.80	0.000697365	0.000697365	**10.487**	3.197
	2.322			4.111								

JOB# 1804-C **PARTY CHIEF** **SH** **DATE:** **July 6, 2005** **FIELD BOOK** **Various** **PAGE**

STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	10.761			16.107								
		253.000			251.600							
	5.830			6.301								
TP-20	4.578	4.578	13.618	5.035	5.035	9.040		506.20	0.000700687	0.000700687	**9.039**	2.755
	3.326			3.769								
	13.734			15.105								
		250.400			253.200							
	4.710			6.330								
TP-21	3.476	3.476	12.019	5.075	5.075	8.543		501.40	0.000694043	0.000694043	**8.542**	2.604
	2.242			3.820								
	10.428			15.225								
		246.800			251.000							
	5.452			5.935								
TP-22	4.189	4.189	11.515	4.693	4.693	7.326		495.20	0.000685461	0.000685461	**7.325**	2.233
	2.926			3.451								
	12.567			14.079								
		252.600			248.400							
	7.069			5.784								
TP-23	5.837	5.837	12.830	4.522	4.522	6.993		505.00	0.000699026	0.000699026	**6.992**	2.131
	4.605			3.260								
	17.511			13.566								
		246.400			252.400							
	5.829			5.272								
TP-24	4.576	4.576	13.384	4.022	4.022	8.808		496.40	0.000687122	0.000687122	**8.807**	2.684
	3.323			2.772								
	13.728			12.066								
		250.600			250.000							
	6.440			6.329								
TP-25	5.192	5.192	13.519	5.057	5.057	8.327		505.00	0.000699026	0.000699026	**8.326**	2.538
	3.944			3.785								
	15.576			15.171								
		249.600			254.400							

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	6.011			5.871								
TP-26	4.763	4.763	13.662	4.620	4.620	8.899		499.80	0.000691828	0.000691828	**8.898**	2.712
	3.515			3.369								
	14.289			13.860								
		249.600			250.200							
	5.143			6.908								
TP-27	4.037	4.037	12.046	5.653	5.653	8.009		500.60	0.000692936	0.000692936	**8.008**	2.441
	2.931			4.398								
	12.111			16.959								
		221.200			251.000							
	5.244			6.483								
TP-28	4.133	4.133	10.794	5.385	5.385	6.661		440.80	0.000610160	0.000610160	**6.660**	2.030
	3.022			4.287								
	12.399			16.155								
		222.200			219.600							
	7.335			6.497								
TP-29	6.058	6.058	11.486	5.366	5.366	5.428		448.40	0.000620680	0.000620680	**5.427**	1.654
	4.781			4.235								
	18.174			16.098								
		255.400			226.200							
	5.896			4.528								
TP-30	4.604	4.604	12.819	3.271	3.271	8.215		506.80	0.000701518	0.000701518	**8.214**	2.504
	3.312			2.014								
	13.812			9.813								
		258.400			251.400							
	6.172			5.982								
TP-31	4.897	4.897	13.013	4.703	4.703	8.116		514.20	0.000711761	0.000711761	**8.115**	2.474
	3.622			3.424								
	14.691			14.109								
		255.000			255.800							
	5.507			6.670								
TP-32	4.214	4.214	11.810	5.417	5.417	7.596		505.60	0.000699857	0.000699857	**7.595**	2.315
	2.921			4.164								

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	12.642			16.251								
		258.600			250.600							
	5.974			7.724								
TP-33	4.679	4.679	10.040	6.449	6.449	5.361		513.60	0.000710930	0.000710930	**5.360**	1.634
	3.384			5.174								
	14.037			19.347								
		259.000			255.000							
	5.289			5.133								
TP-34	3.989	3.989	10.193	3.836	3.836	6.204		518.40	0.000717575	0.000717575	**6.203**	1.891
	2.689			2.539								
	11.967			11.508								
		260.000			259.400							
	5.057			6.250								
TP-35	3.807	3.807	9.056	4.944	4.944	5.249		521.20	0.000721450	0.000721450	**5.248**	1.600
	2.557			3.638								
	11.421			14.832								
		250.000			261.200							
	6.129			6.657								
TP-36	4.854	4.854	8.508	5.402	5.402	3.654		501.00	0.000693489	0.000693489	**3.653**	1.114
	3.579			4.147								
	14.562			16.206								
		255.000			251.000							
	6.416			6.275								
TP-37	5.167	5.167	8.655	5.020	5.020	3.488		506.00	0.000700410	0.000700410	**3.487**	1.063
	3.918			3.765								
	15.501			15.060								
		249.800			251.000							
	6.026			6.199								
TP-38	4.755	4.755	8.480	4.930	4.930	3.725		503.60	0.000697088	0.000697088	**3.724**	1.135
	3.484			3.661								
	14.265			14.790								
		254.200			253.800							

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	7.396			6.235								
TP-39	6.147	6.147	9.632	4.995	4.995	3.485		502.20	0.000695150	0.000695150	**3.484**	1.062
	4.898			3.755								
	18.441			14.985								
		249.800			248.000							
	3.530			4.669								
TP-40	2.263	2.263	8.604	3.291	3.291	6.341		525.40	0.000727264	0.000727264	**6.340**	1.933
	0.996			1.913								
	6.789			9.873								
		253.400			275.600							
	6.410			6.536								
TP-41	5.161	5.161	8.526	5.239	5.239	3.365		512.80	0.000709823	0.000709823	**3.364**	1.025
	3.912			3.942								
	15.483			15.717								
		249.800			259.400							
	6.005			6.115								
TP-42	4.744	4.744	8.430	4.840	4.840	3.686		504.80	0.000698749	0.000698749	**3.685**	1.123
	3.483			3.565								
	14.232			14.520								
		252.200			255.000							
	6.317			5.860								
TP-43	5.069	5.069	8.913	4.586	4.586	3.844		507.00	0.000701795	0.000701795	**3.843**	1.171
	3.821			3.312								
	15.207			13.758								
		249.600			254.800							
	6.522			6.274								
TP-44	5.248	5.248	9.169	4.992	4.992	3.921		506.00	0.000700410	0.000700410	**3.920**	1.195
	3.974			3.710								
	15.744			14.976								
		254.800			256.400							
	5.734			6.091								
TP-45	4.497	4.497	8.850	4.816	4.816	4.353		509.80	0.000705670	0.000705670	**4.352**	1.327
	3.260			3.541								

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	13.491			14.448								
		247.400			255.000							
	6.066			5.911								
TP-46	4.791	4.791	9.016	4.625	4.625	4.225		504.60	0.000698472	0.000698472	**4.224**	1.288
	3.516			3.339								
	14.373			13.875								
		255.000			257.200							
	6.281			6.247								
TP-47	5.022	5.022	9.065	4.973	4.973	4.043		509.80	0.000705670	0.000705670	**4.042**	1.232
	3.763			3.699								
	15.066			14.919								
		251.800			254.800							
	6.235			5.726								
TP-48	5.688	5.688	10.275	4.478	4.478	4.587		501.40	0.000694043	0.000694043	**4.586**	1.398
	5.141			3.230								
	17.064			13.434								
		109.400			249.600							
T-610	2.065			3.532								
DCBM	1.381	1.382	8.655	3.002	3.002	7.273		215.40	0.000298159	0.000298159	**7.273**	2.217
	0.700			2.472								
	4.146			9.006								
		136.500			106.000							
	7.127			6.525								
70+00	5.688	5.688	9.014	5.330	5.329	3.326		375.70	0.000520048	0.000818207	**3.325**	1.013
	4.249			4.133								
	17.064			15.988								
		287.800			239.200							
	5.211			3.292								
TP-26	3.843	3.843	10.284	2.573	2.573	6.441		431.60	0.000597425	0.001415632	**6.439**	1.963
(1804C)	2.475			1.854								
	11.529			7.719								
		273.600			143.800							

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	6.385			6.523								
TP-25	5.070	5.070	10.117	5.237	5.237	5.047		530.80	0.000734739	0.002150371	**5.045**	1.538
(1804C)	3.755			3.951								
	15.210			15.711								
		263.000			257.200							
	6.632			6.402								
TP-24	5.314	5.314	10.356	5.075	5.075	5.042		528.40	0.000731417	0.002881787	**5.039**	1.536
(1804C)	3.996			3.748								
	15.942			15.225								
		263.600			265.400							
	6.211			6.240								
TP-23	4.879	4.879	10.307	4.928	4.928	5.428		526.00	0.000728095	0.003609882	**5.424**	1.653
(1804C)	3.547			3.616								
	14.637			14.784								
		266.400			262.400							
	5.959			6.013								
TP-22	4.727	4.727	10.350	4.684	4.684	5.623		532.20	0.000736677	0.004346559	**5.618**	1.712
(1804C)	3.495			3.355								
	14.181		z	14.052								
		246.400			265.800							
	6.339			5.636								
TP-21	5.074	5.074	11.057	4.367	4.367	5.983		500.20	0.000692382	0.005038940	**5.978**	1.822
(1804C)	3.809			3.098								
	15.222			13.101								
		253.000			253.800							
				5.083								
R-710				3.838	3.838	7.219	**7.180**	502.00	0.000694874	0.005733814	**7.213**	2.199
				2.593								
				11.514								
					249.000							
							LOR=	27934.10				
	TOTAL + =	13941.500		**TOTAL - =**	13992.600			27934.10				

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
						RAW CLOSURE=	0.039					
						ERROR PER FOOT=	0.00000138					
						MTS ALLOWABLE ERROR FOR THIRD ORDER=	0.069					
						ACTUAL ERROR=	0.039					

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	2.065											
T-610	1.381	1.382	10.152				**8.770**		**NGVD 29**			
Not	0.700											
Approved	4.146											
		136.500										
	5.998			6.525								
70+00	4.795	4.799	9.621	5.330	5.329	4.823		375.70	-0.002372813	-0.002372813	**4.825**	1.471
	3.603			4.133								
	14.396			15.988								
		239.500			239.200							
	5.923			5.889								
65+00	4.715	4.719	9.762	4.577	4.578	5.043		501.50	-0.003167329	-0.005540142	**5.049**	1.539
	3.518			3.269								
	14.156			13.735								
		240.500			262.000							
	6.523			6.193								
60+00	5.351	5.346	10.222	4.885	4.885	4.876		502.00	-0.003170487	-0.008710629	**4.885**	1.489
	4.163			3.578								
	16.037			14.656								
		236.000			261.500							
	6.927			6.949								
55+00	5.755	5.757	10.356	5.621	5.624	4.598		500.80	-0.003162908	-0.011873537	**4.610**	1.405
	4.590			4.301								
	17.272			16.871								
		233.700			264.800							
	6.393			6.866								
50+00	5.217	5.214	10.038	5.527	5.532	4.824		500.10	-0.003158487	-0.015032024	**4.839**	1.475
	4.033			4.202								
z	15.643			16.595								
		236.000			266.400							
	6.363			6.261								
45+00	5.190	5.190	10.292	4.933	4.937	5.101		500.40	-0.003160382	-0.018192406	**5.120**	1.560

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
	4.018			3.617								
	15.571		z	14.811								
		234.500			264.400							
	6.533			6.578								
40+00	5.365	5.363	10.406	5.249	5.249	5.043		500.40	-0.003160382	-0.021352788	**5.064**	1.544
	4.191			3.919								
	16.089			15.746								
		234.200			265.900							
	6.788			6.873								
35+00	5.605	5.605	10.468	5.541	5.543	4.863		500.00	-0.003157856	-0.024510644	**4.888**	1.490
	4.423			4.215								
	16.816			16.629								
		236.500			265.800							
	6.362			6.845								
30+00	5.182	5.182	10.130	5.520	5.520	4.948		501.50	-0.003167329	-0.027677973	**4.976**	1.517
	4.002			4.195								
	15.546			16.560								
		236.000			265.000							
	6.318			6.384								
25+00	5.125	5.128	10.196	5.060	5.063	5.068		500.00	-0.003157856	-0.030835829	**5.099**	1.554
	3.942			3.744								
z	15.385			15.188								
		237.600			264.000							
				5.287								
TBM 97				3.970	3.970	6.226	**6.260**	501.00	-0.003164171	-0.034000000	**6.260**	1.908
Not				2.653								
Approved				11.910								
					263.400							
							LOR=	5383.40				
	TOTAL + =	2501.000		**TOTAL - =**	2882.400			5383.40				
						RAW CLOSURE=	-0.034					

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STATION	3 WIRE	AVG.	HI	3 WIRE	AVG.	ELEV.	BM EL.	DIST.	ERROR	ACCUM.	ADJ. EL.	METRIC
						ERROR PER FOOT=	-0.00000632					
						MTS ALLOWABLE ERROR FOR THIRD ORDER=	0.030					
						ACTUAL ERROR=	-0.034		EXCEEDS ALLOWABLE ERROR			

```
1834A.OBS
H 00 1834A                    14:35:13 08/22/82  14:35:13 08/22/82 ENGLISH   2.55
H 99 BISCAYNE BAY WELLS
C 00 14:37:52 08/22/82  90 30.0 000001 SH  CC  SH
C 01 WILD       NA2000     91119            100
S 00 S1                        P F8
S 01 14:40:46 08/22/82  1.000
O 00 BM1                       P F8 PIP-F 61 1
O 09 11:31:31                                                3.891  3.145  2.399
O 00 TP1                       P F8 NL
O 09 11:35:37                                                5.333  4.594  3.855
S 00 S2                        P G1
S 01 15:03:40 08/22/82  1.000
O 00 TP1                       P F8 NL
O 09 15:08:58                                                7.390  6.117  4.844
O 00 TP2                       P F8 NL
O 09 15:11:47                                                5.870  4.590  3.310
S 00 S3                        P F8
S 01 15:15:48 08/22/82  1.000
O 00 TP2                       P F8 NL
O 09 15:16:43                                                6.243  5.024  3.805
O 00 TP3                       P F8 NL
O 09 15:19:46                                                5.686  4.430  3.174
S 00 S4                        P F8
S 01 15:20:13 08/22/82  1.000
O 00 TP3                       P F8 NL
O 09 15:23:30                                                6.190  4.915  3.640
O 00 TP4                       P F8 NL
O 09 15:25:26                                                6.260  5.008  3.756
S 00 S5                        P F8
S 01 15:25:57 08/22/82  1.000
O 00 TP4                       P F8 NL
O 09 15:29:20                                                6.255  4.994  3.733
O 00 TP5                       P F8 NL
O 09 15:31:25                                                6.105  4.830  3.555
S 00 S6                        P F8
S 01 15:31:32 08/22/82  1.000
O 00 TP5                       P F8 NL
O 09 15:34:14                                                4.974  3.685  2.396
O 00 TP6                       P F8 NL
O 09 15:39:01                                                7.126  5.851  4.576
S 00 S8                        P F8
S 01 10:42:13 08/24/82  1.000
O 00 TP6                       P F8 NL
O 09 10:49:28                                                4.546  4.184  3.822
O 00 BM3                       P F8 PIP(V-314)R725
O 09 10:50:53                                                4.853  4.628  4.403
C 00 15:40:02 08/25/82  90 30.0 000001 SH  CC  SH
C 01 WILD       NA2000     91119            100
S 00 S9                        P F8
S 01 15:40:18 08/25/82  1.000
O 00 TP6                       P F8
O 09 15:45:04                                                4.733  4.208  3.683
O 00 TP7                       P F8
O 09 15:48:32                                                5.211  4.673  4.135
S 00 S10                       P F8
S 01 15:48:38 08/25/82  1.000
O 00 TP7                       P F8
O 09 15:50:35                                                7.859  6.570  5.281
O 00 TP8                       P F8
O 09 15:53:26                                                5.971  4.708  3.445
S 00 S11                       P F8
S 01 15:53:32 08/25/82  1.000
O 00 TP8                       P F8
O 09 15:55:49                                                3.116  2.682  2.248
O 00 MW1                       P F8 MW-bbcw9mwa
O 09 15:58:21                                                7.801  7.472  7.143
O 00 GND1                      P F8 GND
O 09 15:58:58                                                7.641  7.307  6.973
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O 00 MW2                        P F8 MW-bbcw9mwb
O 09 16:00:01                                          7.806  7.436  7.066
O 00 GND2                       P F8
O 09 16:00:21                                          7.650  7.275  6.900
S 00 S12                        P F8
S 01 16:00:48 08/25/82  1.000
O 00 GND2                       P F8
O 09 16:01:35                                          7.599  7.223  6.847
O 00 TP8                        P F8 NL
O 09 16:02:35                                          3.075  2.642  2.209
S 00 S13                        P F8
S 01 16:02:44 08/25/82  1.000
O 00 TP8                        P F8 NL
O 09 16:05:11                                          6.037  4.728  3.419
O 00 TP7                        P F8
O 09 16:07:24                                          7.831  6.588  5.345
S 00 S14                        P F8
S 01 16:07:31 08/25/82  1.000
O 00 TP7                        P F8
O 09 16:09:30                                          5.398  4.847  4.296
O 00 TP6                        P F8
O 09 16:10:40                                          4.901  4.383  3.865
S 00 S15                        P F8
S 01 16:11:10 08/25/82  1.000
OD00 BM3                        P F8 CMON-R725
OD09 16:13:03                                          4.673  4.450  4.227
S 00 S15                        P F8
S 01 16:13:31 08/25/82  1.000
O 00 TP6                        P F8
O 09 16:13:51                                          4.673  4.450  4.227
O 00 BM2                        P F8 CMON-R725
O 09 16:14:43                                          5.021  4.893  4.765
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                 10 99 100
C 03 00:00:00                       D   0  0  0.0  90  0  0.0
C 03 00:00:00                       D   0  0  0.0  90  0  0.0
C 03 00:00:00                       R 180  0  0.0 270  0  0.0
C 03 00:00:00                       R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S15,BM3,TP8,MW2,GND2
‘↕F2–    5¶“ñ┬‘↕^”– €¤  ¤  x*|←–┼          “Ò“¼└‘↕^”–♬—   ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

1834A.1D

```
 MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 TP8       - GND2            .012
 TP7       - TP8             .002
 TP6       - TP7             .001
 END OF MISCLOSURE REPORT

    22 OF    30 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
```

LEVEL NETWORK ADJUSTMENT

NUMBER OF BENCHMARKS = 2
NUMBER OF STATIONS = 8
NUMBER OF MEASUREMENTS = 7
NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS = 15

RESULTS OF ADJUSTMENT

BENCHMARK ELEVATION RESIDUALS

STATION	INPUT ELEV.	ADJUSTED ELEV.	ERROR EST.	RESIDUAL
BM1	7.130	7.130	.000	.000 (.0)
BM3	5.260	5.260	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BM3 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
BM1	TP1	-1.449	.000 (.0)	.010
TP1	TP2	1.527	.000 (.0)	.010
TP2	TP3	.594	.000 (.0)	.010
TP3	TP4	-.093	.000 (.0)	.010
TP4	TP5	.164	.000 (.0)	.010
TP5	TP6	-2.166	.000 (.0)	.010
TP6	BM3	-.444	.000 (.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL TP6 - BM3 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	7.130	.000
TP1	5.681	.021
TP2	7.207	.027
TP3	7.801	.030
TP4	7.707	.030
TP5	7.871	.027
TP6	5.704	.021
BM3	5.260	.000

STANDARD ERROR OF UNIT WEIGHT IS .113
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .113 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834A.CHL

PROJECT NAME IS 1834A

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 2951.200
CLOSURE IN ELEVATION (Z) = -.003
CLOSURE PER STATION = .000
PRECISION = 1 / 983733.

STATION	ELEVATION (Z)
BM1	7.130
TP1	5.681

```
        TP2                 7.207
        TP3                 7.801
        TP4                 7.707
        TP5                 7.871
        TP6                 5.704
        BM3                 5.260


 TOTAL LENGTH OF EVALUATED SURVEY DISTANCE =       .559 MILES
 OVERALL PRECISION = 1 /      983733.
```

```
1834A.CTL
G 00 1834A
G 01 BM1      BM1         P F8 IRC F61-1                    0901 83F88
G 02                           7.1300                          .0001
G 01 BBM1     BBM1        P F8 IRC H-111                    0901 83F88
G 02                           4.9000                          .0001
G 01 BM3      BM3         P F8 IRC R-725                    0901 83F88
G 02                           5.2600                          .0001
```

```
1834A.XYZ
G 00         1834A.XYZ
G 01 BM1                    P F8 PIP-F 61 1                 0901 83F88
G 02                           7.130                           .000
G 01 TP1                    P F8 NL                         0901 83F88
G 02                           5.681                           .021
G 01 TP2                    P F8 NL                         0901 83F88
G 02                           7.207                           .027
G 01 TP3                    P F8 NL                         0901 83F88
G 02                           7.801                           .030
G 01 TP4                    P F8 NL                         0901 83F88
G 02                           7.707                           .030
G 01 TP5                    P F8 NL                         0901 83F88
G 02                           7.871                           .027
G 01 TP6                    P F8 NL                         0901 83F88
G 02                           5.704                           .021
G 01 BM3                    P F8 PIP(V-314)R725              0901 83F88
G 02                           5.260                           .000
G 01 TP7                    P F8                            0901 83F88
G 02                           5.240
G 01 TP8                    P F8                            0901 83F88
G 02                           7.101
G 01 MW1                    P F8 MW-bbcw9mwa                0901 83F88
G 02                           2.311
G 01 GND1                   P F8 GND                        0901 83F88
G 02                           2.476
G 01 MW2                    P F8 MW-bbcw9mwb                0901 83F88
G 02                           2.347
G 01 GND2                   P F8                            0901 83F88
G 02                           2.514
G 01 BM2                    P F8 CMON-R725                  0901 83F88
G 02                           5.261
```

```
1834A.OBS
H 00 1834A(NGVD-29)          14:35:13 08/22/82  14:35:13 08/22/82 ENGLISH   2.55
H 99 BISCAYNE BAY WELLS
C 00 14:37:52 08/22/82  90 30.0 000001 SH  CC  SH
C 01 WILD       NA2000     91119            100
S 00 S1                        P F8
S 01 14:40:46 08/22/82  1.000
O 00 BM1                       P F8 PIP-F 61 1
O 09 11:31:31                                                3.891  3.145  2.399
O 00 TP1                       P F8 NL
O 09 11:35:37                                                5.333  4.594  3.855
S 00 S2                        P G1
S 01 15:03:40 08/22/82  1.000
O 00 TP1                       P F8 NL
O 09 15:08:58                                                7.390  6.117  4.844
O 00 TP2                       P F8 NL
O 09 15:11:47                                                5.870  4.590  3.310
S 00 S3                        P F8
S 01 15:15:48 08/22/82  1.000
O 00 TP2                       P F8 NL
O 09 15:16:43                                                6.243  5.024  3.805
O 00 TP3                       P F8 NL
O 09 15:19:46                                                5.686  4.430  3.174
S 00 S4                        P F8
S 01 15:20:13 08/22/82  1.000
O 00 TP3                       P F8 NL
O 09 15:23:30                                                6.190  4.915  3.640
O 00 TP4                       P F8 NL
O 09 15:25:26                                                6.260  5.008  3.756
S 00 S5                        P F8
S 01 15:25:57 08/22/82  1.000
O 00 TP4                       P F8 NL
O 09 15:29:20                                                6.255  4.994  3.733
O 00 TP5                       P F8 NL
O 09 15:31:25                                                6.105  4.830  3.555
S 00 S6                        P F8
S 01 15:31:32 08/22/82  1.000
O 00 TP5                       P F8 NL
O 09 15:34:14                                                4.974  3.685  2.396
O 00 TP6                       P F8 NL
O 09 15:39:01                                                7.126  5.851  4.576
S 00 S8                        P F8
S 01 10:42:13 08/24/82  1.000
O 00 TP6                       P F8 NL
O 09 10:49:28                                                4.546  4.184  3.822
O 00 BM3                       P F8 PIP R-725
O 09 10:50:53                                                4.853  4.628  4.403
C 00 15:40:02 08/25/82  90 30.0 000001 SH  CC  SH
C 01 WILD       NA2000     91119            100
S 00 S9                        P F8
S 01 15:40:18 08/25/82  1.000
O 00 TP6                       P F8
O 09 15:45:04                                                4.733  4.208  3.683
O 00 TP7                       P F8
O 09 15:48:32                                                5.211  4.673  4.135
S 00 S10                       P F8
S 01 15:48:38 08/25/82  1.000
O 00 TP7                       P F8
O 09 15:50:35                                                7.859  6.570  5.281
O 00 TP8                       P F8
O 09 15:53:26                                                5.971  4.708  3.445
S 00 S11                       P F8
S 01 15:53:32 08/25/82  1.000
O 00 TP8                       P F8
O 09 15:55:49                                                3.116  2.682  2.248
O 00 MW1                       P F8 MW-bbcw9mwa
O 09 15:58:21                                                7.801  7.472  7.143
O 00 GND1                      P F8 GND
O 09 15:58:58                                                7.641  7.307  6.973
O 00 MW2                       P F8 MW-bbcw9mwb
```

```
O 09 16:00:01                                                  7.806  7.436  7.066
O 00 GND2                       P F8
O 09 16:00:21                                                  7.650  7.275  6.900
S 00 S12                        P F8
S 01 16:00:48 08/25/82  1.000
O 00 GND2                       P F8
O 09 16:01:35                                                  7.599  7.223  6.847
O 00 TP8                        P F8 NL
O 09 16:02:35                                                  3.075  2.642  2.209
S 00 S13                        P F8
S 01 16:02:44 08/25/82  1.000
O 00 TP8                        P F8 NL
O 09 16:05:11                                                  6.037  4.728  3.419
O 00 TP7                        P F8
O 09 16:07:24                                                  7.831  6.588  5.345
S 00 S14                        P F8
S 01 16:07:31 08/25/82  1.000
O 00 TP7                        P F8
O 09 16:09:30                                                  5.398  4.847  4.296
O 00 TP6                        P F8
O 09 16:10:40                                                  4.901  4.383  3.865
S 00 S15                        P F8
S 01 16:11:10 08/25/82  1.000
OD00 BM3                        P F8 CMON-R725
OD09 16:13:03                                                  4.673  4.450  4.227
S 00 S15                        P F8
S 01 16:13:31 08/25/82  1.000
O 00 TP6                        P F8
O 09 16:13:51                                                  4.673  4.450  4.227
O 00 BM2                        P F8 CMON-R725
O 09 16:14:43                                                  5.021  4.893  4.765
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                 10 99 100
C 03 00:00:00                       D   0  0  0.0  90  0  0.0
C 03 00:00:00                       D   0  0  0.0  90  0  0.0
C 03 00:00:00                       R 180  0  0.0 270  0  0.0
C 03 00:00:00                       R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
```

```
1834A.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 TP8      - GND2            .012
 TP7      - TP8             .002
 TP6      - TP7             .001
 END OF MISCLOSURE REPORT

    20 OF    29 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   2 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     3
 NUMBER OF STATIONS =     9
 NUMBER OF MEASUREMENTS =     8
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       25

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL
```

BM1	8.660	8.660	.000	.000 (.0)
BM2	6.780	6.780	.000	.000 (.0)
BM3	6.780	6.780	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BM1 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
BM1	TP1	-1.449	-.002 (.2)	.010
TP1	TP2	1.527	-.002 (.2)	.010
TP2	TP3	.594	-.002 (.2)	.010
TP3	TP4	-.093	-.002 (.2)	.010
TP4	TP5	.164	-.002 (.2)	.010
TP5	TP6	-2.166	-.002 (.2)	.010
TP6	BM3	-.444	-.001 (.1)	.010
TP6	BM2	-.443	-.002 (.2)	.010

ELEV. DIFF. RMS ERROR = .002 SNOOP RMS = .2
MAX. ELEV. DIFF. RESIDUAL TP4 - TP5 OF .002

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 2 D.F. IS 6.16

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	8.660	.000
TP1	7.209	.021
TP2	8.734	.027
TP3	9.326	.030
TP4	9.231	.029
TP5	9.393	.025
TP6	7.225	.016
BM3	6.780	.000
BM2	6.780	.000

STANDARD ERROR OF UNIT WEIGHT IS .378
WITH 2 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.159 < .378 < 1.731
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834A.CHL

PROJECT NAME IS 1834A

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 2951.200
CLOSURE IN ELEVATION (Z) = -.013
CLOSURE PER STATION = -.002
PRECISION = 1 / 227015.

STATION	ELEVATION (Z)
BM1	8.660
TP1	7.209
TP2	8.734
TP3	9.326
TP4	9.231
TP5	9.393
TP6	7.225
BM3	6.780

```
 TOTAL LENGTH OF EVALUATED SURVEY DISTANCE =       .559 MILES
 OVERALL PRECISION = 1 /      227015.
```

```
1834A.CTL
G 00 1834A
G 01 BM1      BM1         P F8 F-61-1                          0901 83F29
G 02                                8.6600                        .0001
G 01 BM2      BM2         P F8 R-725                           0901 83F29
G 02                                6.7800                        .0001
G 01 BM3      BM3         P F8 R-725                           0901 83F29
G 02                                6.7800                        .0001
```

```
1834A.XYZ
G 00         1834A.XYZ
G 01 BM1                      P F8 PIP-F 61 1                  0901 83F29
G 02                                8.660                         .000
G 01 TP1                      P F8 NL                          0901 83F29
G 02                                7.209                         .021
G 01 TP2                      P F8 NL                          0901 83F29
G 02                                8.734                         .027
G 01 TP3                      P F8 NL                          0901 83F29
G 02                                9.326                         .030
G 01 TP4                      P F8 NL                          0901 83F29
G 02                                9.231                         .029
G 01 TP5                      P F8 NL                          0901 83F29
G 02                                9.393                         .025
G 01 TP6                      P F8 NL                          0901 83F29
G 02                                7.225                         .016
G 01 BM3                      P F8 PIP R-725                   0901 83F29
G 02                                6.780                         .000
G 01 TP7                      P F8                             0901 83F29
G 02                                6.760
G 01 TP8                      P F8                             0901 83F29
G 02                                8.621
G 01 MW1                      P F8 MW-bbcw9mwa                 0901 83F29
G 02                                3.831
G 01 GND1                     P F8 GND                         0901 83F29
G 02                                3.996
G 01 MW2                      P F8 MW-bbcw9mwb                 0901 83F29
G 02                                3.867
G 01 GND2                     P F8                             0901 83F29
G 02                                4.034
G 01 BM2                      P F8 CMON-R725                   0901 83F29
G 02                                6.780                         .000
```

```
1834B.OBS
H 00 1834B                    08:48:58 11/12/95  08:48:58 11/12/95 ENGLISH   2.55
H 99 LEVEL RUN FOR SFWMD. BISCAYNE BAY COSTAL WETLANDS WELLS
C 00 08:51:36 11/12/95  90 30.0 000001 DF  TB  TD
C 01 WILD       NA2000     90788           100
C 13 09:07:04  4.12  4.94  5.05  5.87
H 99 TASK 9
S 00 S1                          P F8
S 01 08:25:20 08/25/82  1.000
O 00 BM1                         P G1 CMON-f61 1
O 09 08:36:33                                                3.081  2.169  1.257
O 00 TP1                         P F8 NL
O 09 08:39:05                                                8.132  6.885  5.638
S 00 S2                          P F8
S 01 08:39:12 08/25/82  1.000
O 00 TP1                         P F8 NL
O 09 08:42:39                                                6.414  5.205  3.996
O 00 TP2                         P F8 NL
O 09 08:45:46                                                6.430  5.203  3.976
S 00 S3                          P F8
S 01 08:45:53 08/25/82  1.000
O 00 TP2                         P F8 NL
O 09 08:49:02                                                6.124  4.859  3.594
O 00 TP3                         P F8 NL
O 09 08:52:19                                                6.247  5.003  3.759
S 00 S4                          P F8
S 01 08:52:25 08/25/82  1.000
O 00 TP3                         P F8 NL
O 09 08:55:28                                                6.521  5.252  3.983
O 00 TP4                         P F8 NL
O 09 08:58:26                                                6.553  5.286  4.019
S 00 S5                          P F8
S 01 08:58:31 08/25/82  1.000
O 00 TP4                         P F8 NL
O 09 09:01:24                                                6.607  5.378  4.149
O 00 TP5                         P F8 NL
O 09 09:04:31                                                6.196  4.940  3.684
S 00 S6                          P F8
S 01 09:04:37 08/25/82  1.000
O 00 TP5                         P F8 NL
O 09 09:07:36                                                6.024  4.785  3.546
O 00 TP6                         P F8 NL
O 09 09:11:01                                                5.799  4.532  3.265
S 00 S7                          P F8
S 01 09:11:06 08/25/82  1.000
O 00 TP6                         P F8 NL
O 09 09:14:21                                                6.176  4.909  3.642
O 00 TP7                         P F8 NL
O 09 09:17:54                                                5.772  4.531  3.290
S 00 S8                          P F8
S 01 09:18:03 08/25/82  1.000
O 00 TP7                         P F8 NL
O 09 09:23:46                                                5.989  4.739  3.489
O 00 TP8                         P F8 NL
O 09 09:24:58                                                5.735  4.461  3.187
S 00 S9                          P F8
S 01 09:25:05 08/25/82  1.000
O 00 TP8                         P F8 NL
O 09 09:27:54                                                6.416  5.153  3.890
O 00 TP9                         P F8 NL
O 09 09:30:39                                                6.577  5.307  4.037
S 00 S10                         P F8
S 01 09:30:47 08/25/82  1.000
O 00 TP9                         P F8 NL
O 09 09:34:35                                                6.834  5.584  4.334
O 00 TP10                        P F8 NL
O 09 09:37:32                                                6.046  4.755  3.464
S 00 S11                         P F8
S 01 09:37:38 08/25/82  1.000
O 00 TP10                        P F8 NL
```

```
O 09 09:40:36                                                5.381  4.118  2.855
O 00 TP11                      P F8 NL
O 09 09:43:31                                                5.854  4.587  3.320
S 00 S12                       P F8
S 01 09:43:35 08/25/82  1.000
O 00 TP11                      P F8 NL
O 09 09:47:18                                                6.063  4.780  3.497
O 00 TP12                      P F8 NL
O 09 09:50:18                                                6.091  4.838  3.585
S 00 S13                       P F8
S 01 09:50:25 08/25/82  1.000
O 00 TP12                      P F8 NL
O 09 09:53:27                                                6.359  5.059  3.759
O 00 TP13                      P F8 NL
O 09 09:56:11                                                5.997  4.702  3.407
S 00 S14                       P F8
S 01 09:56:16 08/25/82  1.000
O 00 TP13                      P F8 NL
O 09 10:00:20                                                6.650  5.131  3.612
O 00 TP14                      P F8 NL
O 09 10:10:05                                                9.541  8.028  6.515
S 00 S15                       P F8
S 01 10:10:16 08/25/82  1.000
O 00 TP14                      P F8 NL
O 09 10:35:37                                                6.608  5.426  4.244
O 00 TP15                      P F8 NL
O 09 10:39:09                                                6.659  5.407  4.155
S 00 S16                       P F8
S 01 10:39:17 08/25/82  1.000
O 00 TP15                      P F8 NL
O 09 10:43:33                                                6.227  5.011  3.795
O 00 TP16                      P F8 NL
O 09 10:46:43                                                6.668  5.417  4.166
S 00 S17                       P F8
S 01 10:46:57 08/25/82  1.000
O 00 TP16                      P F8 NL
O 09 10:51:17                                                6.745  5.483  4.221
O 00 TP17                      P F8 NL
O 09 10:54:47                                                6.645  5.393  4.141
S 00 S18                       P F8
S 01 10:54:54 08/25/82  1.000
O 00 TP17                      P F8 NL
O 09 10:58:30                                                6.603  5.331  4.059
O 00 TP18                      P F8 NL
O 09 11:01:18                                                6.390  5.147  3.904
S 00 S19                       P F8
S 01 11:01:23 08/25/82  1.000
O 00 TP18                      P F8 NL
O 09 11:06:05                                                5.795  5.083  4.371
O 00 TP19                      P F8 NL
O 09 11:07:54                                                6.085  5.180  4.275
S 00 S20                       P F8
S 01 11:08:03 08/25/82  1.000
S 00 S20                       P F8
S 01 11:20:29 08/25/82  1.000
S 00 S20                       P F8
S 01 11:20:45 08/25/82  1.000
O 00 TP19                      P F8 NL
O 09 11:23:52                                                5.893  4.656  3.419
O 00 TP20                      P F8 NL
O 09 11:27:22                                                5.997  4.743  3.489
S 00 S21                       P F8
S 01 11:27:28 08/25/82  1.000
O 00 TP20                      P F8 NL
O 09 11:30:30                                                6.575  5.334  4.093
O 00 TP21                      P F8 NL
O 09 11:33:51                                                6.509  5.271  4.033
S 00 S22                       P F8
S 01 11:33:58 08/25/82  1.000
O 00 TP21                      P F8 NL
```

```
O 09 11:37:36                                                  6.256  5.034  3.812
O 00 TP22                      P F8 NL
O 09 11:41:10                                                  6.321  5.076  3.831
S 00 S23                       P F8
S 01 11:41:15 08/25/82  1.000
O 00 TP22                      P F8 NL
O 09 11:44:12                                                  6.387  5.142  3.897
O 00 TP23                      P F8 NL
O 09 11:47:22                                                  6.330  5.099  3.868
S 00 S24                       P F8
S 01 11:47:27 08/25/82  1.000
O 00 TP23                      P F8 NL
O 09 11:50:36                                                  6.555  5.202  3.849
O 00 TP24                      P F8 NL
O 09 11:54:22                                                  6.296  4.977  3.658
S 00 S25                       P F8
S 01 11:54:29 08/25/82  1.000
O 00 TP24                      P F8 NL
O 09 11:56:57                                                  6.137  5.685  5.233
O 00 TP25                      P F8 NL
O 09 11:58:25                                                  3.660  2.951  2.242
S 00 S26                       P F8
S 01 11:58:33 08/25/82  1.000
O 00 TP25                      P F8 NL
O 09 13:34:50                                                  6.318  5.069  3.820
O 00 TP26                      P F8 NL
O 09 13:36:19                                                  5.885  4.852  3.819
S 00 S27                       P F8
S 01 13:36:25 08/25/82  1.000
O 00 TP26                      P F8 NL
O 09 13:38:52                                                  6.671  5.386  4.101
O 00 TP27                      P F8 NL
O 09 13:40:02                                                  6.291  5.028  3.765
S 00 S28                       P F8
S 01 13:40:08 08/25/82  1.000
O 00 TP27                      P F8 NL
O 09 13:42:03                                                  5.955  4.707  3.459
O 00 TP28                      P F8 NL
O 09 13:43:02                                                  6.058  4.697  3.336
S 00 S29                       P F8
S 01 13:43:14 08/25/82  1.000
O 00 TP28                      P F8 NL
O 09 13:44:57                                                  6.514  5.289  4.064
O 00 TP29                      P F8 NL
O 09 13:45:55                                                  6.806  5.501  4.196
S 00 S30                       P F8
S 01 13:46:00 08/25/82  1.000
O 00 TP29                      P F8 NL
O 09 13:48:24                                                  5.969  4.644  3.319
O 00 TP30                      P F8 NL
O 09 13:49:09                                                  6.233  4.915  3.597
S 00 S31                       P F8
S 01 13:49:13 08/25/82  1.000
O 00 TP30                      P F8 NL
O 09 13:51:07                                                  6.381  5.139  3.897
O 00 TP31                      P F8 NL
O 09 13:51:54                                                  6.518  5.180  3.842
S 00 S32                       P F8
S 01 13:51:58 08/25/82  1.000
O 00 TP31                      P F8 NL
O 09 13:53:34                                                  6.281  5.057  3.833
O 00 TP32                      P F8 NL
O 09 13:54:16                                                  6.235  4.970  3.705
S 00 S33                       P F8
S 01 13:54:24 08/25/82  1.000
O 00 TP32                      P F8 NL
O 09 13:56:06                                                  6.274  4.993  3.712
O 00 TP33                      P F8 NL
O 09 13:56:58                                                  6.381  5.061  3.741
S 00 S34                       P F8
```

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S 01 13:57:04 08/25/82  1.000
O 00 TP33                      P F8 NL
O 09 13:59:04                                                5.894  5.209  4.524
O 00 BTP20                     P F8 NL TP20 (SEG B)
O 09 13:59:57                                                5.684  5.119  4.554
S 00 S21                       P G1
S 01 10:57:19 11/12/95  1.000
O 00 BTP20                     P F8 NL-PK
O 09 11:01:26                                                5.753  4.206  2.659
O 00 BTP21                     P F8 NL-60D
O 09 11:07:45                                                8.801  7.267  5.733
S 00 S22                       P G1
S 01 11:08:01 11/12/95  1.000
O 00 BTP21                     P F8 NL-60D
O 09 12:16:38                                                6.714  5.388  4.062
O 00 BTP22                     P F8 NL-60D
O 09 12:19:52                                                6.045  4.565  3.085
S 00 S23                       P G1
S 01 12:20:07 11/12/95  1.000
O 00 BTP22                     P F8 NL-60D
O 09 12:24:54                                                5.842  4.540  3.238
O 00 BTP23                     P F8 NL-60D
O 09 12:27:13                                                5.106  3.983  2.860
S 00 S24                       P G1
S 01 12:27:25 11/12/95  1.000
O 00 BTP23                     P F8 NL-60D
O 09 12:30:12                                                5.320  4.264  3.208
O 00 BTP24                     P F8 NL-60D
O 09 12:32:37                                                5.750  4.533  3.316
S 00 S25                       P G1
S 01 12:32:51 11/12/95  1.000
O 00 BTP24                     P F8 NL-60D
O 09 12:36:08                                                5.534  4.446  3.358
O 00 BTP25                     P F8 NL-60D
O 09 12:38:38                                                6.643  5.536  4.429
S 00 S26                       P G1
S 01 12:39:03 11/12/95  1.000
O 00 BTP25                     P F8 NL-60D
O 09 12:42:17                                                5.929  4.954  3.979
O 00 BTP26                     P F8 NL-PK
O 09 12:44:52                                                5.596  4.726  3.856
S 00 S27                       P G1
S 01 12:45:18 11/12/95  1.000
O 00 BTP26                     P F8 NL-PK
O 09 12:47:57                                                5.651  5.538  5.425
O 00 BMNW1                     P F8 MISC-MONWELL-5A
O 99 TOP OF PVC OUTER CASEING 6"
O 09 12:51:40                                                1.644  1.506  1.368
S 00 S28                       P G1
S 01 12:52:02 11/12/95  1.000
O 00 BMNW1                     P F8 MISC-MONWELL-5A
O 99 TOP OF PVC OUTER CASEING 6"
O 09 12:55:41                                                1.885  1.746  1.607
O 00 BMNW2                     P F8 MISC-MONWELL-5A
O 99 TOP OF 2" PVC MONWELL INSIDE OUTER CASEING
O 09 12:58:23                                                2.274  2.136  1.998
S 00 S29                       P G1
S 01 12:58:42 11/12/95  1.000
O 00 BMNW2                     P F8 MISC-MONWELL-5A
O 99 TOP OF 2" PVC MONWELL INSIDE OUTER CASEING
O 09 12:59:32                                                2.104  1.964  1.824
O 00 BTP27                     P F8 NL-PK
O 09 13:06:10                                                5.719  5.604  5.489
S 00 S30                       P G1
S 01 13:06:16 11/12/95  1.000
O 00 BTP27                     P F8 NL-PK
O 09 13:08:10                                                5.770  4.920  4.070
O 00 BTP28                     P F8 NL-60D
O 09 13:10:09                                                6.145  5.152  4.159
S 00 S31                       P G1
```

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S 01 13:10:28 11/12/95  1.000
O 00 BTP28                    P F8 NL-60D
O 09 13:13:01                                          6.739  5.733  4.727
O 00 BTP29                    P F8 NL-60D
O 09 13:15:18                                          5.834  4.644  3.454
S 00 S32                      P G1
S 01 13:15:33 11/12/95  1.000
O 00 BTP29                    P F8 NL-60D
O 09 13:18:36                                          6.038  4.823  3.608
O 00 BTP30                    P F8 NL-60D
O 09 13:20:50                                          5.617  4.556  3.495
S 00 S33                      P G1
S 01 13:21:05 11/12/95  1.000
O 00 BTP30                    P F8 NL-60D
O 09 13:23:44                                          5.482  4.390  3.298
O 00 BTP31                    P F8 NL-60D
O 09 13:25:53                                          6.276  4.944  3.612
S 00 S34                      P G1
S 01 13:26:07 11/12/95  1.000
O 00 BTP31                    P F8 NL-60D
O 09 13:29:33                                          6.330  4.878  3.426
O 00 BTP32                    P F8 NL-60D
O 09 13:32:21                                          7.060  5.705  4.350
S 00 S35                      P G1
S 01 13:32:37 11/12/95  1.000
O 00 BTP32                    P F8 NL-60D
O 09 13:38:41                                          8.828  7.247  5.666
O 00 BTP33                    P F8 NL-PK
O 09 13:41:49                                          5.722  4.181  2.640
S 00 S36                      P G1
S 01 13:42:14 11/12/95  1.000
O 00 BTP33                    P F8 NL-PK
O 09 14:11:52                                          5.881  4.668  3.455
O 00 BTP34                    P F8 NL-PK
O 09 14:13:32                                          5.974  4.617  3.260
S 00 S37                      P G1
S 01 14:14:16 11/12/95  1.000
O 00 BTP34                    P F8 NL-PK
O 09 14:16:19                                          5.609  4.335  3.061
O 00 BTP35                    P F8 NL-PK
O 09 14:17:59                                          5.952  4.651  3.350
S 00 S38                      P G1
S 01 14:18:10 11/12/95  1.000
O 00 BTP35                    P F8 NL-PK
O 09 14:20:43                                          6.142  4.882  3.622
O 00 BTP36                    P F8 NL-PK
O 09 14:22:00                                          5.979  4.704  3.429
S 00 S39                      P G1
S 01 14:22:27 11/12/95  1.000
O 00 BTP36                    P F8 NL-PK
O 09 14:26:45                                          5.992  4.682  3.372
O 00 BTP37                    P F8 NL-PK
O 09 14:27:52                                          5.638  4.369  3.100
S 00 S40                      P G1
S 01 14:28:07 11/12/95  1.000
O 00 BTP37                    P F8 NL-PK
O 09 14:32:35                                          5.705  4.418  3.131
O 00 BTP38                    P F8 NL-PK
O 09 14:35:27                                          5.805  4.473  3.141
S 00 S41                      P G1
S 01 14:35:49 11/12/95  1.000
O 00 BTP38                    P F8 NL-PK
O 09 14:39:39                                          5.973  4.648  3.323
O 00 BTP39                    P F8 NL-PK
O 09 14:41:13                                          5.840  4.524  3.208
S 00 S42                      P G1
S 01 14:41:33 11/12/95  1.000
O 00 BTP39                    P F8 NL-PK
O 09 14:44:19                                          5.742  4.429  3.116
O 00 BTP40                    P F8 NL-PK
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O 09 14:46:14                                                  5.837  4.495  3.153
S 00 S43                        P G1
S 01 14:46:45 11/12/95  1.000
O 00 BTP40                      P F8 NL-PK
O 09 14:49:25                                                  5.967  4.563  3.159
O 00 BTP41                      P F8 NL-PK
O 09 14:50:57                                                  5.630  4.376  3.122
S 00 S44                        P G1
S 01 14:51:23 11/12/95  1.000
O 00 BTP41                      P F8 NL-PK
O 09 14:54:14                                                  5.597  4.302  3.007
O 00 BTP42                      P F8 NL-PK
O 09 14:55:47                                                  5.745  4.410  3.075
S 00 S45                        P G1
S 01 14:56:01 11/12/95  1.000
O 00 BTP42                      P F8 NL-PK
O 09 14:58:53                                                  5.836  4.486  3.136
O 00 BTP43                      P F8 NL-PK
O 09 15:00:17                                                  5.837  4.519  3.201
S 00 S46                        P G1
S 01 15:00:59 11/12/95  1.000
O 00 BTP43                      P F8 NL-PK
O 09 15:04:05                                                  5.803  4.510  3.217
O 00 BTP44                      P F8 NL-PK
O 09 15:05:49                                                  6.028  4.679  3.330
S 00 S47                        P G1
S 01 15:06:01 11/12/95  1.000
O 00 BTP44                      P F8 NL-PK
O 09 15:09:22                                                  6.231  4.910  3.589
O 00 BTP45                      P F8 NL-PK
O 09 15:11:48                                                  5.610  4.304  2.998
S 00 S48                        P G1
S 01 15:12:04 11/12/95  1.000
O 00 BTP45                      P F8 NL-PK
O 09 15:16:44                                                  6.225  4.851  3.477
O 00 BTP46                      P F8 NL-PK
O 09 15:19:02                                                  5.802  4.518  3.234
S 00 S49                        P G1
S 01 15:19:22 11/12/95  1.000
O 00 BTP46                      P F8 NL-PK
O 09 15:23:19                                                  5.786  4.462  3.138
O 00 BTP47                      P F8 NL-PK
O 09 15:26:06                                                  5.807  4.489  3.171
S 00 S50                        P G1
S 01 15:26:23 11/12/95  1.000
O 00 BTP47                      P F8 NL-PK
O 09 15:29:43                                                  5.691  4.223  2.755
O 00 BBM2                       P F8 CMON-SFWMD-V314
O 09 15:31:18                                                  3.672  3.154  2.636
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
```

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P 00
P 01 S50,BBM2,BTP47,BMNW2
‘↕F2–   0¶“ñ┬‘↕^”– €¤  ¤  x*`‼–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“x└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

1834B.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
STATIONS MISCLOSURE
END OF MISCLOSURE REPORT

50 OF 115 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
BAND IS 1 STATIONS
LEVEL NETWORK ADJUSTMENT

NUMBER OF BENCHMARKS = 2
NUMBER OF STATIONS = 65
NUMBER OF MEASUREMENTS = 64
NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS = 129

RESULTS OF ADJUSTMENT

BENCHMARK ELEVATION RESIDUALS

STATION	INPUT ELEV.	ADJUSTED ELEV.	ERROR EST.	RESIDUAL
BM1	7.130	7.130	.000	.000 (.0)
BBM2	6.170	6.170	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BBM2 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
BM1	TP1	-4.716	.000 (.0)	.010
TP1	TP2	.002	.000 (.0)	.010
TP2	TP3	-.144	.000 (.0)	.010
TP3	TP4	-.034	.000 (.0)	.010
TP4	TP5	.438	.000 (.0)	.010
TP5	TP6	.253	.000 (.0)	.010
TP6	TP7	.378	.000 (.0)	.010
TP7	TP8	.278	.000 (.0)	.010
TP8	TP9	-.154	.000 (.0)	.010
TP9	TP10	.829	.000 (.0)	.010
TP10	TP11	-.469	.000 (.0)	.010
TP11	TP12	-.058	.000 (.0)	.010
TP12	TP13	.357	.000 (.0)	.010
TP13	TP14	-2.897	.000 (.0)	.010
TP14	TP15	.019	.000 (.0)	.010
TP15	TP16	-.406	.000 (.0)	.010
TP16	TP17	.090	.000 (.0)	.010
TP17	TP18	.184	.000 (.0)	.010
TP18	TP19	-.097	.000 (.0)	.010
TP19	TP20	-.087	.000 (.0)	.010
TP20	TP21	.063	.000 (.0)	.010
TP21	TP22	-.042	.000 (.0)	.010
TP22	TP23	.043	.000 (.0)	.010
TP23	TP24	.225	.000 (.0)	.010
TP24	TP25	2.734	.000 (.0)	.010
TP25	TP26	.217	.000 (.0)	.010
TP26	TP27	.358	.000 (.0)	.010
TP27	TP28	.010	.000 (.0)	.010
TP28	TP29	-.212	.000 (.0)	.010
TP29	TP30	-.271	.000 (.0)	.010
TP30	TP31	-.041	.000 (.0)	.010
TP31	TP32	.087	.000 (.0)	.010

TP32	TP33	-.068	.000	(.0)	.010
TP33	BTP20	.090	.000	(.0)	.010
BTP20	BTP21	-3.061	.000	(.0)	.010
BTP21	BTP22	.823	.000	(.0)	.010
BTP22	BTP23	.557	.000	(.0)	.010
BTP23	BTP24	-.269	.000	(.0)	.010
BTP24	BTP25	-1.090	.000	(.0)	.010
BTP25	BTP26	.228	.000	(.0)	.010
BTP26	BMNW1	4.032	.000	(.0)	.010
BMNW1	BMNW2	-.390	.000	(.0)	.010
BMNW2	BTP27	-3.640	.000	(.0)	.010
BTP27	BTP28	-.232	.000	(.0)	.010
BTP28	BTP29	1.089	.000	(.0)	.010
BTP29	BTP30	.267	.000	(.0)	.010
BTP30	BTP31	-.554	.000	(.0)	.010
BTP31	BTP32	-.827	.000	(.0)	.010
BTP32	BTP33	3.066	.000	(.0)	.010
BTP33	BTP34	.051	.000	(.0)	.010
BTP34	BTP35	-.316	.000	(.0)	.010
BTP35	BTP36	.178	.000	(.0)	.010
BTP36	BTP37	.313	.000	(.0)	.010
BTP37	BTP38	-.055	.000	(.0)	.010
BTP38	BTP39	.124	.000	(.0)	.010
BTP39	BTP40	-.066	.000	(.0)	.010
BTP40	BTP41	.187	.000	(.0)	.010
BTP41	BTP42	-.108	.000	(.0)	.010
BTP42	BTP43	-.033	.000	(.0)	.010
BTP43	BTP44	-.169	.000	(.0)	.010
BTP44	BTP45	.606	.000	(.0)	.010
BTP45	BTP46	.333	.000	(.0)	.010
BTP46	BTP47	-.027	.000	(.0)	.010
BTP47	BBM2	1.069	.000	(.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL BTP21 - BTP22 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	7.130	.000
TP1	2.414	.012
TP2	2.416	.017
TP3	2.272	.021
TP4	2.238	.024
TP5	2.676	.027
TP6	2.929	.029
TP7	3.306	.031
TP8	3.584	.033
TP9	3.430	.035
TP10	4.259	.036
TP11	3.790	.038
TP12	3.732	.039
TP13	4.089	.040
TP14	1.192	.041
TP15	1.211	.042
TP16	.805	.043
TP17	.895	.044
TP18	1.079	.045
TP19	.982	.046
TP20	.894	.046
TP21	.957	.047
TP22	.915	.047
TP23	.958	.048
TP24	1.183	.048
TP25	3.917	.049
TP26	4.134	.049
TP27	4.492	.049
TP28	4.502	.050

TP29	4.290	.050
TP30	4.019	.050
TP31	3.978	.050
TP32	4.065	.050
TP33	3.996	.050
BTP20	4.086	.050
BTP21	1.025	.050
BTP22	1.848	.050
BTP23	2.405	.049
BTP24	2.136	.049
BTP25	1.046	.049
BTP26	1.274	.048
BMNW1	5.306	.048
BMNW2	4.916	.047
BTP27	1.276	.047
BTP28	1.044	.046
BTP29	2.132	.046
BTP30	2.399	.045
BTP31	1.845	.044
BTP32	1.018	.043
BTP33	4.084	.042
BTP34	4.135	.041
BTP35	3.819	.040
BTP36	3.997	.039
BTP37	4.310	.038
BTP38	4.255	.036
BTP39	4.379	.035
BTP40	4.313	.033
BTP41	4.500	.031
BTP42	4.391	.029
BTP43	4.358	.027
BTP44	4.189	.024
BTP45	4.795	.021
BTP46	5.128	.017
BTP47	5.101	.012
BBM2	6.170	.000

STANDARD ERROR OF UNIT WEIGHT IS .062
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .062 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834B.CHL
PROJECT NAME IS 1834B

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 30266.500
CLOSURE IN ELEVATION (Z) = -.005
CLOSURE PER STATION = .000
PRECISION = 1 / 6053300.

STATION	ELEVATION (Z)
BM1	7.130
TP1	2.414
TP2	2.416
TP3	2.272
TP4	2.238
TP5	2.676
TP6	2.929
TP7	3.306
TP8	3.584
TP9	3.430
TP10	4.259
TP11	3.790
TP12	3.732
TP13	4.089
TP14	1.192

TP15	1.211
TP16	.805
TP17	.895
TP18	1.079
TP19	.982
TP20	.894
TP21	.957
TP22	.915
TP23	.958
TP24	1.183
TP25	3.917
TP26	4.134
TP27	4.492
TP28	4.502
TP29	4.290
TP30	4.019
TP31	3.978
TP32	4.065
TP33	3.996
BTP20	4.086
BTP21	1.025
BTP22	1.848
BTP23	2.405
BTP24	2.136
BTP25	1.046
BTP26	1.274
BMNW1	5.306
BMNW2	4.916
BTP27	1.276
BTP28	1.044
BTP29	2.132
BTP30	2.399
BTP31	1.845
BTP32	1.018
BTP33	4.084
BTP34	4.135
BTP35	3.819
BTP36	3.997
BTP37	4.310
BTP38	4.255
BTP39	4.379
BTP40	4.313
BTP41	4.500
BTP42	4.391
BTP43	4.358
BTP44	4.189
BTP45	4.795
BTP46	5.128
BTP47	5.101
BBM2	6.170

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 5.732 MILES
OVERALL PRECISION = 1 / 6053300.

```
1834B.CTL
G 00 1834B
G 01 BM1      BM1         P F8 IRC F61-1                    0901 83F88
G 02                                7.1300                     .0001
G 01 BBM2     BBM2        P F8 IRC V-314                    0901 83F88
G 02                                6.1700                     .0001
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1834B.XYZ
G 00         1834B.XYZ
G 01 BM1                      P G1 CMON-f61 1               0901 83F88
G 02                               7.130                      .000
G 01 TP1                      P F8 NL                       0901 83F88
G 02                               2.414                      .012
```

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G 01 TP2                P F8 NL                 0901 83F88
G 02                        2.416                  .017
G 01 TP3                P F8 NL                 0901 83F88
G 02                        2.272                  .021
G 01 TP4                P F8 NL                 0901 83F88
G 02                        2.238                  .024
G 01 TP5                P F8 NL                 0901 83F88
G 02                        2.676                  .027
G 01 TP6                P F8 NL                 0901 83F88
G 02                        2.929                  .029
G 01 TP7                P F8 NL                 0901 83F88
G 02                        3.306                  .031
G 01 TP8                P F8 NL                 0901 83F88
G 02                        3.584                  .033
G 01 TP9                P F8 NL                 0901 83F88
G 02                        3.430                  .035
G 01 TP10               P F8 NL                 0901 83F88
G 02                        4.259                  .036
G 01 TP11               P F8 NL                 0901 83F88
G 02                        3.790                  .038
G 01 TP12               P F8 NL                 0901 83F88
G 02                        3.732                  .039
G 01 TP13               P F8 NL                 0901 83F88
G 02                        4.089                  .040
G 01 TP14               P F8 NL                 0901 83F88
G 02                        1.192                  .041
G 01 TP15               P F8 NL                 0901 83F88
G 02                        1.211                  .042
G 01 TP16               P F8 NL                 0901 83F88
G 02                         .805                  .043
G 01 TP17               P F8 NL                 0901 83F88
G 02                         .895                  .044
G 01 TP18               P F8 NL                 0901 83F88
G 02                        1.079                  .045
G 01 TP19               P F8 NL                 0901 83F88
G 02                         .982                  .046
G 01 TP20               P F8 NL                 0901 83F88
G 02                         .894                  .046
G 01 TP21               P F8 NL                 0901 83F88
G 02                         .957                  .047
G 01 TP22               P F8 NL                 0901 83F88
G 02                         .915                  .047
G 01 TP23               P F8 NL                 0901 83F88
G 02                         .958                  .048
G 01 TP24               P F8 NL                 0901 83F88
G 02                        1.183                  .048
G 01 TP25               P F8 NL                 0901 83F88
G 02                        3.917                  .049
G 01 TP26               P F8 NL                 0901 83F88
G 02                        4.134                  .049
G 01 TP27               P F8 NL                 0901 83F88
G 02                        4.492                  .049
G 01 TP28               P F8 NL                 0901 83F88
G 02                        4.502                  .050
G 01 TP29               P F8 NL                 0901 83F88
G 02                        4.290                  .050
G 01 TP30               P F8 NL                 0901 83F88
G 02                        4.019                  .050
G 01 TP31               P F8 NL                 0901 83F88
G 02                        3.978                  .050
G 01 TP32               P F8 NL                 0901 83F88
G 02                        4.065                  .050
G 01 TP33               P F8 NL                 0901 83F88
G 02                        3.996                  .050
G 01 BTP20              P F8 NL TP20 (SEG B)    0901 83F88
G 02                        4.086                  .050
G 01 BTP21              P F8 NL-60D             0901 83F88
G 02                        1.025                  .050
G 01 BTP22              P F8 NL-60D             0901 83F88
G 02                        1.848                  .050
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G 01 BTP23                      P F8 NL-60D                    0901 83F88
G 02                                2.405                         .049
G 01 BTP24                      P F8 NL-60D                    0901 83F88
G 02                                2.136                         .049
G 01 BTP25                      P F8 NL-60D                    0901 83F88
G 02                                1.046                         .049
G 01 BTP26                      P F8 NL-PK                     0901 83F88
G 02                                1.274                         .048
G 01 BMNW1                      P F8 MISC-MONWELL-5A           0901 83F88
G 99 TOP OF PVC OUTER CASEING 6"
G 02                                5.306                         .048
G 01 BMNW2                      P F8 MISC-MONWELL-5A           0901 83F88
G 99 TOP OF 2" PVC MONWELL INSIDE OUTER CASEING
G 02                                4.916                         .047
G 01 BTP27                      P F8 NL-PK                     0901 83F88
G 02                                1.276                         .047
G 01 BTP28                      P F8 NL-60D                    0901 83F88
G 02                                1.044                         .046
G 01 BTP29                      P F8 NL-60D                    0901 83F88
G 02                                2.132                         .046
G 01 BTP30                      P F8 NL-60D                    0901 83F88
G 02                                2.399                         .045
G 01 BTP31                      P F8 NL-60D                    0901 83F88
G 02                                1.845                         .044
G 01 BTP32                      P F8 NL-60D                    0901 83F88
G 02                                1.018                         .043
G 01 BTP33                      P F8 NL-PK                     0901 83F88
G 02                                4.084                         .042
G 01 BTP34                      P F8 NL-PK                     0901 83F88
G 02                                4.135                         .041
G 01 BTP35                      P F8 NL-PK                     0901 83F88
G 02                                3.819                         .040
G 01 BTP36                      P F8 NL-PK                     0901 83F88
G 02                                3.997                         .039
G 01 BTP37                      P F8 NL-PK                     0901 83F88
G 02                                4.310                         .038
G 01 BTP38                      P F8 NL-PK                     0901 83F88
G 02                                4.255                         .036
G 01 BTP39                      P F8 NL-PK                     0901 83F88
G 02                                4.379                         .035
G 01 BTP40                      P F8 NL-PK                     0901 83F88
G 02                                4.313                         .033
G 01 BTP41                      P F8 NL-PK                     0901 83F88
G 02                                4.500                         .031
G 01 BTP42                      P F8 NL-PK                     0901 83F88
G 02                                4.391                         .029
G 01 BTP43                      P F8 NL-PK                     0901 83F88
G 02                                4.358                         .027
G 01 BTP44                      P F8 NL-PK                     0901 83F88
G 02                                4.189                         .024
G 01 BTP45                      P F8 NL-PK                     0901 83F88
G 02                                4.795                         .021
G 01 BTP46                      P F8 NL-PK                     0901 83F88
G 02                                5.128                         .017
G 01 BTP47                      P F8 NL-PK                     0901 83F88
G 02                                5.101                         .012
G 01 BBM2                       P F8 CMON-SFWMD-V314           0901 83F88
G 02                                6.170                         .000
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1834B.OBS
H 00 1834B                    08:48:58 11/12/95  08:48:58 11/12/95 ENGLISH   2.55
H 99 LEVEL RUN FOR SFWMD. BISCAYNE BAY COSTAL WETLANDS WELLS
C 00 08:51:36 11/12/95  90 30.0 000001 DF  TB  TD
C 01 WILD       NA2000     90788           100
C 13 09:07:04  4.12  4.94  5.05  5.87
H 99 TASK 9
S 00 S1                          P F8
S 01 08:25:20 08/25/82  1.000
O 00 BM1                         P G1 CMON-f61 1
O 09 08:36:33                                                3.081  2.169  1.257
O 00 TP1                         P F8 NL
O 09 08:39:05                                                8.132  6.885  5.638
S 00 S2                          P F8
S 01 08:39:12 08/25/82  1.000
O 00 TP1                         P F8 NL
O 09 08:42:39                                                6.414  5.205  3.996
O 00 TP2                         P F8 NL
O 09 08:45:46                                                6.430  5.203  3.976
S 00 S3                          P F8
S 01 08:45:53 08/25/82  1.000
O 00 TP2                         P F8 NL
O 09 08:49:02                                                6.124  4.859  3.594
O 00 TP3                         P F8 NL
O 09 08:52:19                                                6.247  5.003  3.759
S 00 S4                          P F8
S 01 08:52:25 08/25/82  1.000
O 00 TP3                         P F8 NL
O 09 08:55:28                                                6.521  5.252  3.983
O 00 TP4                         P F8 NL
O 09 08:58:26                                                6.553  5.286  4.019
S 00 S5                          P F8
S 01 08:58:31 08/25/82  1.000
O 00 TP4                         P F8 NL
O 09 09:01:24                                                6.607  5.378  4.149
O 00 TP5                         P F8 NL
O 09 09:04:31                                                6.196  4.940  3.684
S 00 S6                          P F8
S 01 09:04:37 08/25/82  1.000
O 00 TP5                         P F8 NL
O 09 09:07:36                                                6.024  4.785  3.546
O 00 TP6                         P F8 NL
O 09 09:11:01                                                5.799  4.532  3.265
S 00 S7                          P F8
S 01 09:11:06 08/25/82  1.000
O 00 TP6                         P F8 NL
O 09 09:14:21                                                6.176  4.909  3.642
O 00 TP7                         P F8 NL
O 09 09:17:54                                                5.772  4.531  3.290
S 00 S8                          P F8
S 01 09:18:03 08/25/82  1.000
O 00 TP7                         P F8 NL
O 09 09:23:46                                                5.989  4.739  3.489
O 00 TP8                         P F8 NL
O 09 09:24:58                                                5.735  4.461  3.187
S 00 S9                          P F8
S 01 09:25:05 08/25/82  1.000
O 00 TP8                         P F8 NL
O 09 09:27:54                                                6.416  5.153  3.890
O 00 TP9                         P F8 NL
O 09 09:30:39                                                6.577  5.307  4.037
S 00 S10                         P F8
S 01 09:30:47 08/25/82  1.000
O 00 TP9                         P F8 NL
O 09 09:34:35                                                6.834  5.584  4.334
O 00 TP10                        P F8 NL
O 09 09:37:32                                                6.046  4.755  3.464
S 00 S11                         P F8
S 01 09:37:38 08/25/82  1.000
O 00 TP10                        P F8 NL
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O 09 09:40:36                                                5.381  4.118  2.855
O 00 TP11                       P F8 NL
O 09 09:43:31                                                5.854  4.587  3.320
S 00 S12                        P F8
S 01 09:43:35 08/25/82  1.000
O 00 TP11                       P F8 NL
O 09 09:47:18                                                6.063  4.780  3.497
O 00 TP12                       P F8 NL
O 09 09:50:18                                                6.091  4.838  3.585
S 00 S13                        P F8
S 01 09:50:25 08/25/82  1.000
O 00 TP12                       P F8 NL
O 09 09:53:27                                                6.359  5.059  3.759
O 00 TP13                       P F8 NL
O 09 09:56:11                                                5.997  4.702  3.407
S 00 S14                        P F8
S 01 09:56:16 08/25/82  1.000
O 00 TP13                       P F8 NL
O 09 10:00:20                                                6.650  5.131  3.612
O 00 TP14                       P F8 NL
O 09 10:10:05                                                9.541  8.028  6.515
S 00 S15                        P F8
S 01 10:10:16 08/25/82  1.000
O 00 TP14                       P F8 NL
O 09 10:35:37                                                6.608  5.426  4.244
O 00 TP15                       P F8 NL
O 09 10:39:09                                                6.659  5.407  4.155
S 00 S16                        P F8
S 01 10:39:17 08/25/82  1.000
O 00 TP15                       P F8 NL
O 09 10:43:33                                                6.227  5.011  3.795
O 00 TP16                       P F8 NL
O 09 10:46:43                                                6.668  5.417  4.166
S 00 S17                        P F8
S 01 10:46:57 08/25/82  1.000
O 00 TP16                       P F8 NL
O 09 10:51:17                                                6.745  5.483  4.221
O 00 TP17                       P F8 NL
O 09 10:54:47                                                6.645  5.393  4.141
S 00 S18                        P F8
S 01 10:54:54 08/25/82  1.000
O 00 TP17                       P F8 NL
O 09 10:58:30                                                6.603  5.331  4.059
O 00 TP18                       P F8 NL
O 09 11:01:18                                                6.390  5.147  3.904
S 00 S19                        P F8
S 01 11:01:23 08/25/82  1.000
O 00 TP18                       P F8 NL
O 09 11:06:05                                                5.795  5.083  4.371
O 00 TP19                       P F8 NL
O 09 11:07:54                                                6.085  5.180  4.275
S 00 S20                        P F8
S 01 11:08:03 08/25/82  1.000
S 00 S20                        P F8
S 01 11:20:29 08/25/82  1.000
S 00 S20                        P F8
S 01 11:20:45 08/25/82  1.000
O 00 TP19                       P F8 NL
O 09 11:23:52                                                5.893  4.656  3.419
O 00 TP20                       P F8 NL
O 09 11:27:22                                                5.997  4.743  3.489
S 00 S21                        P F8
S 01 11:27:28 08/25/82  1.000
O 00 TP20                       P F8 NL
O 09 11:30:30                                                6.575  5.334  4.093
O 00 TP21                       P F8 NL
O 09 11:33:51                                                6.509  5.271  4.033
S 00 S22                        P F8
S 01 11:33:58 08/25/82  1.000
O 00 TP21                       P F8 NL
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O 09 11:37:36                                                  6.256  5.034  3.812
O 00 TP22                      P F8 NL
O 09 11:41:10                                                  6.321  5.076  3.831
S 00 S23                       P F8
S 01 11:41:15 08/25/82  1.000
O 00 TP22                      P F8 NL
O 09 11:44:12                                                  6.387  5.142  3.897
O 00 TP23                      P F8 NL
O 09 11:47:22                                                  6.330  5.099  3.868
S 00 S24                       P F8
S 01 11:47:27 08/25/82  1.000
O 00 TP23                      P F8 NL
O 09 11:50:36                                                  6.555  5.202  3.849
O 00 TP24                      P F8 NL
O 09 11:54:22                                                  6.296  4.977  3.658
S 00 S25                       P F8
S 01 11:54:29 08/25/82  1.000
O 00 TP24                      P F8 NL
O 09 11:56:57                                                  6.137  5.685  5.233
O 00 TP25                      P F8 NL
O 09 11:58:25                                                  3.660  2.951  2.242
S 00 S26                       P F8
S 01 11:58:33 08/25/82  1.000
O 00 TP25                      P F8 NL
O 09 13:34:50                                                  6.318  5.069  3.820
O 00 TP26                      P F8 NL
O 09 13:36:19                                                  5.885  4.852  3.819
S 00 S27                       P F8
S 01 13:36:25 08/25/82  1.000
O 00 TP26                      P F8 NL
O 09 13:38:52                                                  6.671  5.386  4.101
O 00 TP27                      P F8 NL
O 09 13:40:02                                                  6.291  5.028  3.765
S 00 S28                       P F8
S 01 13:40:08 08/25/82  1.000
O 00 TP27                      P F8 NL
O 09 13:42:03                                                  5.955  4.707  3.459
O 00 TP28                      P F8 NL
O 09 13:43:02                                                  6.058  4.697  3.336
S 00 S29                       P F8
S 01 13:43:14 08/25/82  1.000
O 00 TP28                      P F8 NL
O 09 13:44:57                                                  6.514  5.289  4.064
O 00 TP29                      P F8 NL
O 09 13:45:55                                                  6.806  5.501  4.196
S 00 S30                       P F8
S 01 13:46:00 08/25/82  1.000
O 00 TP29                      P F8 NL
O 09 13:48:24                                                  5.969  4.644  3.319
O 00 TP30                      P F8 NL
O 09 13:49:09                                                  6.233  4.915  3.597
S 00 S31                       P F8
S 01 13:49:13 08/25/82  1.000
O 00 TP30                      P F8 NL
O 09 13:51:07                                                  6.381  5.139  3.897
O 00 TP31                      P F8 NL
O 09 13:51:54                                                  6.518  5.180  3.842
S 00 S32                       P F8
S 01 13:51:58 08/25/82  1.000
O 00 TP31                      P F8 NL
O 09 13:53:34                                                  6.281  5.057  3.833
O 00 TP32                      P F8 NL
O 09 13:54:16                                                  6.235  4.970  3.705
S 00 S33                       P F8
S 01 13:54:24 08/25/82  1.000
O 00 TP32                      P F8 NL
O 09 13:56:06                                                  6.274  4.993  3.712
O 00 TP33                      P F8 NL
O 09 13:56:58                                                  6.381  5.061  3.741
S 00 S34                       P F8
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S 01 13:57:04 08/25/82  1.000
O 00 TP33                      P F8 NL
O 09 13:59:04                                                5.894  5.209  4.524
O 00 BTP20                     P F8 NL TP20 (SEG B)
O 09 13:59:57                                                5.684  5.119  4.554
S 00 S21                       P G1
S 01 10:57:19 11/12/95  1.000
O 00 BTP20                     P F8 NL-PK
O 09 11:01:26                                                5.753  4.206  2.659
O 00 BTP21                     P F8 NL-60D
O 09 11:07:45                                                8.801  7.267  5.733
S 00 S22                       P G1
S 01 11:08:01 11/12/95  1.000
O 00 BTP21                     P F8 NL-60D
O 09 12:16:38                                                6.714  5.388  4.062
O 00 BTP22                     P F8 NL-60D
O 09 12:19:52                                                6.045  4.565  3.085
S 00 S23                       P G1
S 01 12:20:07 11/12/95  1.000
O 00 BTP22                     P F8 NL-60D
O 09 12:24:54                                                5.842  4.540  3.238
O 00 BTP23                     P F8 NL-60D
O 09 12:27:13                                                5.106  3.983  2.860
S 00 S24                       P G1
S 01 12:27:25 11/12/95  1.000
O 00 BTP23                     P F8 NL-60D
O 09 12:30:12                                                5.320  4.264  3.208
O 00 BTP24                     P F8 NL-60D
O 09 12:32:37                                                5.750  4.533  3.316
S 00 S25                       P G1
S 01 12:32:51 11/12/95  1.000
O 00 BTP24                     P F8 NL-60D
O 09 12:36:08                                                5.534  4.446  3.358
O 00 BTP25                     P F8 NL-60D
O 09 12:38:38                                                6.643  5.536  4.429
S 00 S26                       P G1
S 01 12:39:03 11/12/95  1.000
O 00 BTP25                     P F8 NL-60D
O 09 12:42:17                                                5.929  4.954  3.979
O 00 BTP26                     P F8 NL-PK
O 09 12:44:52                                                5.596  4.726  3.856
S 00 S27                       P G1
S 01 12:45:18 11/12/95  1.000
O 00 BTP26                     P F8 NL-PK
O 09 12:47:57                                                5.651  5.538  5.425
O 00 BMNW1                     P F8 MISC-MONWELL-5A
O 99 TOP OF PVC OUTER CASEING 6"
O 09 12:51:40                                                1.644  1.506  1.368
S 00 S28                       P G1
S 01 12:52:02 11/12/95  1.000
O 00 BMNW1                     P F8 MISC-MONWELL-5A
O 99 TOP OF PVC OUTER CASEING 6"
O 09 12:55:41                                                1.885  1.746  1.607
O 00 BMNW2                     P F8 MISC-MONWELL-5A
O 99 TOP OF 2" PVC MONWELL INSIDE OUTER CASEING
O 09 12:58:23                                                2.274  2.136  1.998
S 00 S29                       P G1
S 01 12:58:42 11/12/95  1.000
O 00 BMNW2                     P F8 MISC-MONWELL-5A
O 99 TOP OF 2" PVC MONWELL INSIDE OUTER CASEING
O 09 12:59:32                                                2.104  1.964  1.824
O 00 BTP27                     P F8 NL-PK
O 09 13:06:10                                                5.719  5.604  5.489
S 00 S30                       P G1
S 01 13:06:16 11/12/95  1.000
O 00 BTP27                     P F8 NL-PK
O 09 13:08:10                                                5.770  4.920  4.070
O 00 BTP28                     P F8 NL-60D
O 09 13:10:09                                                6.145  5.152  4.159
S 00 S31                       P G1
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S 01 13:10:28 11/12/95  1.000
O 00 BTP28                    P F8 NL-60D
O 09 13:13:01                                        6.739  5.733  4.727
O 00 BTP29                    P F8 NL-60D
O 09 13:15:18                                        5.834  4.644  3.454
S 00 S32                      P G1
S 01 13:15:33 11/12/95  1.000
O 00 BTP29                    P F8 NL-60D
O 09 13:18:36                                        6.038  4.823  3.608
O 00 BTP30                    P F8 NL-60D
O 09 13:20:50                                        5.617  4.556  3.495
S 00 S33                      P G1
S 01 13:21:05 11/12/95  1.000
O 00 BTP30                    P F8 NL-60D
O 09 13:23:44                                        5.482  4.390  3.298
O 00 BTP31                    P F8 NL-60D
O 09 13:25:53                                        6.276  4.944  3.612
S 00 S34                      P G1
S 01 13:26:07 11/12/95  1.000
O 00 BTP31                    P F8 NL-60D
O 09 13:29:33                                        6.330  4.878  3.426
O 00 BTP32                    P F8 NL-60D
O 09 13:32:21                                        7.060  5.705  4.350
S 00 S35                      P G1
S 01 13:32:37 11/12/95  1.000
O 00 BTP32                    P F8 NL-60D
O 09 13:38:41                                        8.828  7.247  5.666
O 00 BTP33                    P F8 NL-PK
O 09 13:41:49                                        5.722  4.181  2.640
S 00 S36                      P G1
S 01 13:42:14 11/12/95  1.000
O 00 BTP33                    P F8 NL-PK
O 09 14:11:52                                        5.881  4.668  3.455
O 00 BTP34                    P F8 NL-PK
O 09 14:13:32                                        5.974  4.617  3.260
S 00 S37                      P G1
S 01 14:14:16 11/12/95  1.000
O 00 BTP34                    P F8 NL-PK
O 09 14:16:19                                        5.609  4.335  3.061
O 00 BTP35                    P F8 NL-PK
O 09 14:17:59                                        5.952  4.651  3.350
S 00 S38                      P G1
S 01 14:18:10 11/12/95  1.000
O 00 BTP35                    P F8 NL-PK
O 09 14:20:43                                        6.142  4.882  3.622
O 00 BTP36                    P F8 NL-PK
O 09 14:22:00                                        5.979  4.704  3.429
S 00 S39                      P G1
S 01 14:22:27 11/12/95  1.000
O 00 BTP36                    P F8 NL-PK
O 09 14:26:45                                        5.992  4.682  3.372
O 00 BTP37                    P F8 NL-PK
O 09 14:27:52                                        5.638  4.369  3.100
S 00 S40                      P G1
S 01 14:28:07 11/12/95  1.000
O 00 BTP37                    P F8 NL-PK
O 09 14:32:35                                        5.705  4.418  3.131
O 00 BTP38                    P F8 NL-PK
O 09 14:35:27                                        5.805  4.473  3.141
S 00 S41                      P G1
S 01 14:35:49 11/12/95  1.000
O 00 BTP38                    P F8 NL-PK
O 09 14:39:39                                        5.973  4.648  3.323
O 00 BTP39                    P F8 NL-PK
O 09 14:41:13                                        5.840  4.524  3.208
S 00 S42                      P G1
S 01 14:41:33 11/12/95  1.000
O 00 BTP39                    P F8 NL-PK
O 09 14:44:19                                        5.742  4.429  3.116
O 00 BTP40                    P F8 NL-PK
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O 09 14:46:14                                                5.837  4.495  3.153
S 00 S43                        P G1
S 01 14:46:45 11/12/95  1.000
O 00 BTP40                      P F8 NL-PK
O 09 14:49:25                                                5.967  4.563  3.159
O 00 BTP41                      P F8 NL-PK
O 09 14:50:57                                                5.630  4.376  3.122
S 00 S44                        P G1
S 01 14:51:23 11/12/95  1.000
O 00 BTP41                      P F8 NL-PK
O 09 14:54:14                                                5.597  4.302  3.007
O 00 BTP42                      P F8 NL-PK
O 09 14:55:47                                                5.745  4.410  3.075
S 00 S45                        P G1
S 01 14:56:01 11/12/95  1.000
O 00 BTP42                      P F8 NL-PK
O 09 14:58:53                                                5.836  4.486  3.136
O 00 BTP43                      P F8 NL-PK
O 09 15:00:17                                                5.837  4.519  3.201
S 00 S46                        P G1
S 01 15:00:59 11/12/95  1.000
O 00 BTP43                      P F8 NL-PK
O 09 15:04:05                                                5.803  4.510  3.217
O 00 BTP44                      P F8 NL-PK
O 09 15:05:49                                                6.028  4.679  3.330
S 00 S47                        P G1
S 01 15:06:01 11/12/95  1.000
O 00 BTP44                      P F8 NL-PK
O 09 15:09:22                                                6.231  4.910  3.589
O 00 BTP45                      P F8 NL-PK
O 09 15:11:48                                                5.610  4.304  2.998
S 00 S48                        P G1
S 01 15:12:04 11/12/95  1.000
O 00 BTP45                      P F8 NL-PK
O 09 15:16:44                                                6.225  4.851  3.477
O 00 BTP46                      P F8 NL-PK
O 09 15:19:02                                                5.802  4.518  3.234
S 00 S49                        P G1
S 01 15:19:22 11/12/95  1.000
O 00 BTP46                      P F8 NL-PK
O 09 15:23:19                                                5.786  4.462  3.138
O 00 BTP47                      P F8 NL-PK
O 09 15:26:06                                                5.807  4.489  3.171
S 00 S50                        P G1
S 01 15:26:23 11/12/95  1.000
O 00 BTP47                      P F8 NL-PK
O 09 15:29:43                                                5.691  4.223  2.755
O 00 BBM2                       P F8 CMON-SFWMD-V314
O 09 15:31:18                                                3.672  3.154  2.636
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
```

```
P 00
P 01 S50,BBM2,BTP47,BMNW2
‘↕F2–   0¶“ñ┬‘↕^”– €¤  ¤  x*`‼–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“x└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834B.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 END OF MISCLOSURE REPORT

    50 OF   115 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    65
 NUMBER OF MEASUREMENTS =    64
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =      129

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

   BM1               8.660             8.660         .000         .000  ( .0)
   BBM2              7.700             7.700         .000         .000  ( .0)

 BENCHMARK RMS ERROR =       .000 SNOOP RMS =   .0
 MAX. BENCHMARK RESIDUAL AT STATION         BM1      OF       .000


 RESIDUALS

   FROM          TO            MEASURED      RESIDUAL      EST. ERROR

   BM1           TP1             -4.716          .000  ( .0)    .010
   TP1           TP2               .002          .000  ( .0)    .010
   TP2           TP3              -.144          .000  ( .0)    .010
   TP3           TP4              -.034          .000  ( .0)    .010
   TP4           TP5               .438          .000  ( .0)    .010
   TP5           TP6               .253          .000  ( .0)    .010
   TP6           TP7               .378          .000  ( .0)    .010
   TP7           TP8               .278          .000  ( .0)    .010
   TP8           TP9              -.154          .000  ( .0)    .010
   TP9           TP10              .829          .000  ( .0)    .010
   TP10          TP11             -.469          .000  ( .0)    .010
   TP11          TP12             -.058          .000  ( .0)    .010
   TP12          TP13              .357          .000  ( .0)    .010
   TP13          TP14            -2.897          .000  ( .0)    .010
   TP14          TP15              .019          .000  ( .0)    .010
   TP15          TP16             -.406          .000  ( .0)    .010
   TP16          TP17              .090          .000  ( .0)    .010
   TP17          TP18              .184          .000  ( .0)    .010
   TP18          TP19             -.097          .000  ( .0)    .010
   TP19          TP20             -.087          .000  ( .0)    .010
   TP20          TP21              .063          .000  ( .0)    .010
   TP21          TP22             -.042          .000  ( .0)    .010
   TP22          TP23              .043          .000  ( .0)    .010
   TP23          TP24              .225          .000  ( .0)    .010
   TP24          TP25             2.734          .000  ( .0)    .010
   TP25          TP26              .217          .000  ( .0)    .010
   TP26          TP27              .358          .000  ( .0)    .010
   TP27          TP28              .010          .000  ( .0)    .010
   TP28          TP29             -.212          .000  ( .0)    .010
   TP29          TP30             -.271          .000  ( .0)    .010
   TP30          TP31             -.041          .000  ( .0)    .010
   TP31          TP32              .087          .000  ( .0)    .010
   TP32          TP33             -.068          .000  ( .0)    .010
```

TP33	BTP20	.090	.000	(.0)	.010
BTP20	BTP21	-3.061	.000	(.0)	.010
BTP21	BTP22	.823	.000	(.0)	.010
BTP22	BTP23	.557	.000	(.0)	.010
BTP23	BTP24	-.269	.000	(.0)	.010
BTP24	BTP25	-1.090	.000	(.0)	.010
BTP25	BTP26	.228	.000	(.0)	.010
BTP26	BMNW1	4.032	.000	(.0)	.010
BMNW1	BMNW2	-.390	.000	(.0)	.010
BMNW2	BTP27	-3.640	.000	(.0)	.010
BTP27	BTP28	-.232	.000	(.0)	.010
BTP28	BTP29	1.089	.000	(.0)	.010
BTP29	BTP30	.267	.000	(.0)	.010
BTP30	BTP31	-.554	.000	(.0)	.010
BTP31	BTP32	-.827	.000	(.0)	.010
BTP32	BTP33	3.066	.000	(.0)	.010
BTP33	BTP34	.051	.000	(.0)	.010
BTP34	BTP35	-.316	.000	(.0)	.010
BTP35	BTP36	.178	.000	(.0)	.010
BTP36	BTP37	.313	.000	(.0)	.010
BTP37	BTP38	-.055	.000	(.0)	.010
BTP38	BTP39	.124	.000	(.0)	.010
BTP39	BTP40	-.066	.000	(.0)	.010
BTP40	BTP41	.187	.000	(.0)	.010
BTP41	BTP42	-.108	.000	(.0)	.010
BTP42	BTP43	-.033	.000	(.0)	.010
BTP43	BTP44	-.169	.000	(.0)	.010
BTP44	BTP45	.606	.000	(.0)	.010
BTP45	BTP46	.333	.000	(.0)	.010
BTP46	BTP47	-.027	.000	(.0)	.010
BTP47	BBM2	1.069	.000	(.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL BTP26 - BMNW1 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	8.660	.000
TP1	3.944	.012
TP2	3.946	.017
TP3	3.802	.021
TP4	3.768	.024
TP5	4.206	.027
TP6	4.459	.029
TP7	4.836	.031
TP8	5.114	.033
TP9	4.960	.035
TP10	5.789	.036
TP11	5.320	.038
TP12	5.262	.039
TP13	5.619	.040
TP14	2.722	.041
TP15	2.741	.042
TP16	2.335	.043
TP17	2.425	.044
TP18	2.609	.045
TP19	2.512	.046
TP20	2.424	.046
TP21	2.487	.047
TP22	2.445	.047
TP23	2.488	.048
TP24	2.713	.048
TP25	5.447	.049
TP26	5.664	.049
TP27	6.022	.049
TP28	6.032	.050
TP29	5.820	.050

TP30	5.549	.050
TP31	5.508	.050
TP32	5.595	.050
TP33	5.526	.050
BTP20	5.616	.050
BTP21	2.555	.050
BTP22	3.378	.050
BTP23	3.935	.049
BTP24	3.666	.049
BTP25	2.576	.049
BTP26	2.804	.048
BMNW1	6.836	.048
BMNW2	6.446	.047
BTP27	2.806	.047
BTP28	2.574	.046
BTP29	3.662	.046
BTP30	3.929	.045
BTP31	3.375	.044
BTP32	2.548	.043
BTP33	5.614	.042
BTP34	5.665	.041
BTP35	5.349	.040
BTP36	5.527	.039
BTP37	5.840	.038
BTP38	5.785	.036
BTP39	5.909	.035
BTP40	5.843	.033
BTP41	6.030	.031
BTP42	5.921	.029
BTP43	5.888	.027
BTP44	5.719	.024
BTP45	6.325	.021
BTP46	6.658	.017
BTP47	6.631	.012
BBM2	7.700	.000

STANDARD ERROR OF UNIT WEIGHT IS .062
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .062 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834B.CHL
PROJECT NAME IS 1834B

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 30266.500
CLOSURE IN ELEVATION (Z) = -.005
CLOSURE PER STATION = .000
PRECISION = 1 / 6053300.

STATION	ELEVATION (Z)
BM1	8.660
TP1	3.944
TP2	3.946
TP3	3.802
TP4	3.768
TP5	4.206
TP6	4.459
TP7	4.836
TP8	5.114
TP9	4.960
TP10	5.789
TP11	5.320
TP12	5.262
TP13	5.619
TP14	2.722
TP15	2.741

TP16	2.335
TP17	2.425
TP18	2.609
TP19	2.512
TP20	2.424
TP21	2.487
TP22	2.445
TP23	2.488
TP24	2.713
TP25	5.447
TP26	5.664
TP27	6.022
TP28	6.032
TP29	5.820
TP30	5.549
TP31	5.508
TP32	5.595
TP33	5.526
BTP20	5.616
BTP21	2.555
BTP22	3.378
BTP23	3.935
BTP24	3.666
BTP25	2.576
BTP26	2.804
BMNW1	6.836
BMNW2	6.446
BTP27	2.806
BTP28	2.574
BTP29	3.662
BTP30	3.929
BTP31	3.375
BTP32	2.548
BTP33	5.614
BTP34	5.665
BTP35	5.349
BTP36	5.527
BTP37	5.840
BTP38	5.785
BTP39	5.909
BTP40	5.843
BTP41	6.030
BTP42	5.921
BTP43	5.888
BTP44	5.719
BTP45	6.325
BTP46	6.658
BTP47	6.631
BBM2	7.700

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 5.732 MILES
OVERALL PRECISION = 1 / 6053300.

```
1834B.CTLG 00 1834B
G 01 BM1      BM1         P F8 IRC F61-1                    0901 83F29
G 02                                8.6600                     .0001
G 01 BBM2     BBM2        P F8 IRC V-314                    0901 83F29
G 02                                7.7000                     .0001
```

```
1834B.XYZ
G 00         1834B.XYZ
G 01 BM1                      P G1 CMON-f61 1               0901 83F29
G 02                               8.660                      .000
G 01 TP1                      P F8 NL                       0901 83F29
G 02                               3.944                      .012
G 01 TP2                      P F8 NL                       0901 83F29
G 02                               3.946                      .017
```

```
G 01 TP3                P F8 NL                 0901 83F29
G 02                        3.802                  .021
G 01 TP4                P F8 NL                 0901 83F29
G 02                        3.768                  .024
G 01 TP5                P F8 NL                 0901 83F29
G 02                        4.206                  .027
G 01 TP6                P F8 NL                 0901 83F29
G 02                        4.459                  .029
G 01 TP7                P F8 NL                 0901 83F29
G 02                        4.836                  .031
G 01 TP8                P F8 NL                 0901 83F29
G 02                        5.114                  .033
G 01 TP9                P F8 NL                 0901 83F29
G 02                        4.960                  .035
G 01 TP10               P F8 NL                 0901 83F29
G 02                        5.789                  .036
G 01 TP11               P F8 NL                 0901 83F29
G 02                        5.320                  .038
G 01 TP12               P F8 NL                 0901 83F29
G 02                        5.262                  .039
G 01 TP13               P F8 NL                 0901 83F29
G 02                        5.619                  .040
G 01 TP14               P F8 NL                 0901 83F29
G 02                        2.722                  .041
G 01 TP15               P F8 NL                 0901 83F29
G 02                        2.741                  .042
G 01 TP16               P F8 NL                 0901 83F29
G 02                        2.335                  .043
G 01 TP17               P F8 NL                 0901 83F29
G 02                        2.425                  .044
G 01 TP18               P F8 NL                 0901 83F29
G 02                        2.609                  .045
G 01 TP19               P F8 NL                 0901 83F29
G 02                        2.512                  .046
G 01 TP20               P F8 NL                 0901 83F29
G 02                        2.424                  .046
G 01 TP21               P F8 NL                 0901 83F29
G 02                        2.487                  .047
G 01 TP22               P F8 NL                 0901 83F29
G 02                        2.445                  .047
G 01 TP23               P F8 NL                 0901 83F29
G 02                        2.488                  .048
G 01 TP24               P F8 NL                 0901 83F29
G 02                        2.713                  .048
G 01 TP25               P F8 NL                 0901 83F29
G 02                        5.447                  .049
G 01 TP26               P F8 NL                 0901 83F29
G 02                        5.664                  .049
G 01 TP27               P F8 NL                 0901 83F29
G 02                        6.022                  .049
G 01 TP28               P F8 NL                 0901 83F29
G 02                        6.032                  .050
G 01 TP29               P F8 NL                 0901 83F29
G 02                        5.820                  .050
G 01 TP30               P F8 NL                 0901 83F29
G 02                        5.549                  .050
G 01 TP31               P F8 NL                 0901 83F29
G 02                        5.508                  .050
G 01 TP32               P F8 NL                 0901 83F29
G 02                        5.595                  .050
G 01 TP33               P F8 NL                 0901 83F29
G 02                        5.526                  .050
G 01 BTP20              P F8 NL TP20 (SEG B)    0901 83F29
G 02                        5.616                  .050
G 01 BTP21              P F8 NL-60D             0901 83F29
G 02                        2.555                  .050
G 01 BTP22              P F8 NL-60D             0901 83F29
G 02                        3.378                  .050
G 01 BTP23              P F8 NL-60D             0901 83F29
G 02                        3.935                  .049
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G 01 BTP24                      P F8 NL-60D                    0901 83F29
G 02                                3.666                         .049
G 01 BTP25                      P F8 NL-60D                    0901 83F29
G 02                                2.576                         .049
G 01 BTP26                      P F8 NL-PK                     0901 83F29
G 02                                2.804                         .048
G 01 BMNW1                      P F8 MISC-MONWELL-5A           0901 83F29
G 99 TOP OF PVC OUTER CASEING 6"
G 02                                6.836                         .048
G 01 BMNW2                      P F8 MISC-MONWELL-5A           0901 83F29
G 99 TOP OF 2" PVC MONWELL INSIDE OUTER CASEING
G 02                                6.446                         .047
G 01 BTP27                      P F8 NL-PK                     0901 83F29
G 02                                2.806                         .047
G 01 BTP28                      P F8 NL-60D                    0901 83F29
G 02                                2.574                         .046
G 01 BTP29                      P F8 NL-60D                    0901 83F29
G 02                                3.662                         .046
G 01 BTP30                      P F8 NL-60D                    0901 83F29
G 02                                3.929                         .045
G 01 BTP31                      P F8 NL-60D                    0901 83F29
G 02                                3.375                         .044
G 01 BTP32                      P F8 NL-60D                    0901 83F29
G 02                                2.548                         .043
G 01 BTP33                      P F8 NL-PK                     0901 83F29
G 02                                5.614                         .042
G 01 BTP34                      P F8 NL-PK                     0901 83F29
G 02                                5.665                         .041
G 01 BTP35                      P F8 NL-PK                     0901 83F29
G 02                                5.349                         .040
G 01 BTP36                      P F8 NL-PK                     0901 83F29
G 02                                5.527                         .039
G 01 BTP37                      P F8 NL-PK                     0901 83F29
G 02                                5.840                         .038
G 01 BTP38                      P F8 NL-PK                     0901 83F29
G 02                                5.785                         .036
G 01 BTP39                      P F8 NL-PK                     0901 83F29
G 02                                5.909                         .035
G 01 BTP40                      P F8 NL-PK                     0901 83F29
G 02                                5.843                         .033
G 01 BTP41                      P F8 NL-PK                     0901 83F29
G 02                                6.030                         .031
G 01 BTP42                      P F8 NL-PK                     0901 83F29
G 02                                5.921                         .029
G 01 BTP43                      P F8 NL-PK                     0901 83F29
G 02                                5.888                         .027
G 01 BTP44                      P F8 NL-PK                     0901 83F29
G 02                                5.719                         .024
G 01 BTP45                      P F8 NL-PK                     0901 83F29
G 02                                6.325                         .021
G 01 BTP46                      P F8 NL-PK                     0901 83F29
G 02                                6.658                         .017
G 01 BTP47                      P F8 NL-PK                     0901 83F29
G 02                                6.631                         .012
G 01 BBM2                       P F8 CMON-SFWMD-V314           0901 83F29
G 02                                7.700                         .000
```

```
1834C.OBS
H 00 1834C                    08:23:38 08/25/82  08:23:38 08/25/82 ENGLISH   2.55
H 99 biscayne bay wells
C 00 08:24:57 08/25/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S1                        P F8
S 01 08:25:20 08/25/82  1.000
O 00 BM1                       P G1 CMON-f61 1
O 09 08:36:33                                                3.081  2.169  1.257
O 00 TP1                       P F8 NL
O 09 08:39:05                                                8.132  6.885  5.638
S 00 S2                        P F8
S 01 08:39:12 08/25/82  1.000
O 00 TP1                       P F8 NL
O 09 08:42:39                                                6.414  5.205  3.996
O 00 TP2                       P F8 NL
O 09 08:45:46                                                6.430  5.203  3.976
S 00 S3                        P F8
S 01 08:45:53 08/25/82  1.000
O 00 TP2                       P F8 NL
O 09 08:49:02                                                6.124  4.859  3.594
O 00 TP3                       P F8 NL
O 09 08:52:19                                                6.247  5.003  3.759
S 00 S4                        P F8
S 01 08:52:25 08/25/82  1.000
O 00 TP3                       P F8 NL
O 09 08:55:28                                                6.521  5.252  3.983
O 00 TP4                       P F8 NL
O 09 08:58:26                                                6.553  5.286  4.019
S 00 S5                        P F8
S 01 08:58:31 08/25/82  1.000
O 00 TP4                       P F8 NL
O 09 09:01:24                                                6.607  5.378  4.149
O 00 TP5                       P F8 NL
O 09 09:04:31                                                6.196  4.940  3.684
S 00 S6                        P F8
S 01 09:04:37 08/25/82  1.000
O 00 TP5                       P F8 NL
O 09 09:07:36                                                6.024  4.785  3.546
O 00 TP6                       P F8 NL
O 09 09:11:01                                                5.799  4.532  3.265
S 00 S7                        P F8
S 01 09:11:06 08/25/82  1.000
O 00 TP6                       P F8 NL
O 09 09:14:21                                                6.176  4.909  3.642
O 00 TP7                       P F8 NL
O 09 09:17:54                                                5.772  4.531  3.290
S 00 S8                        P F8
S 01 09:18:03 08/25/82  1.000
O 00 TP7                       P F8 NL
O 09 09:23:46                                                5.989  4.739  3.489
O 00 TP8                       P F8 NL
O 09 09:24:58                                                5.735  4.461  3.187
S 00 S9                        P F8
S 01 09:25:05 08/25/82  1.000
O 00 TP8                       P F8 NL
O 09 09:27:54                                                6.416  5.153  3.890
O 00 TP9                       P F8 NL
O 09 09:30:39                                                6.577  5.307  4.037
S 00 S10                       P F8
S 01 09:30:47 08/25/82  1.000
O 00 TP9                       P F8 NL
O 09 09:34:35                                                6.834  5.584  4.334
O 00 TP10                      P F8 NL
O 09 09:37:32                                                6.046  4.755  3.464
S 00 S11                       P F8
S 01 09:37:38 08/25/82  1.000
O 00 TP10                      P F8 NL
O 09 09:40:36                                                5.381  4.118  2.855
O 00 TP11                      P F8 NL
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O 09 09:43:31                                                  5.854  4.587  3.320
S 00 S12                        P F8
S 01 09:43:35 08/25/82  1.000
O 00 TP11                       P F8 NL
O 09 09:47:18                                                  6.063  4.780  3.497
O 00 TP12                       P F8 NL
O 09 09:50:18                                                  6.091  4.838  3.585
S 00 S13                        P F8
S 01 09:50:25 08/25/82  1.000
O 00 TP12                       P F8 NL
O 09 09:53:27                                                  6.359  5.059  3.759
O 00 TP13                       P F8 NL
O 09 09:56:11                                                  5.997  4.702  3.407
S 00 S14                        P F8
S 01 09:56:16 08/25/82  1.000
O 00 TP13                       P F8 NL
O 09 10:00:20                                                  6.650  5.131  3.612
O 00 TP14                       P F8 NL
O 09 10:10:05                                                  9.541  8.028  6.515
S 00 S15                        P F8
S 01 10:10:16 08/25/82  1.000
O 00 TP14                       P F8 NL
O 09 10:35:37                                                  6.608  5.426  4.244
O 00 TP15                       P F8 NL
O 09 10:39:09                                                  6.659  5.407  4.155
S 00 S16                        P F8
S 01 10:39:17 08/25/82  1.000
O 00 TP15                       P F8 NL
O 09 10:43:33                                                  6.227  5.011  3.795
O 00 TP16                       P F8 NL
O 09 10:46:43                                                  6.668  5.417  4.166
S 00 S17                        P F8
S 01 10:46:57 08/25/82  1.000
O 00 TP16                       P F8 NL
O 09 10:51:17                                                  6.745  5.483  4.221
O 00 TP17                       P F8 NL
O 09 10:54:47                                                  6.645  5.393  4.141
S 00 S18                        P F8
S 01 10:54:54 08/25/82  1.000
O 00 TP17                       P F8 NL
O 09 10:58:30                                                  6.603  5.331  4.059
O 00 TP18                       P F8 NL
O 09 11:01:18                                                  6.390  5.147  3.904
S 00 S19                        P F8
S 01 11:01:23 08/25/82  1.000
O 00 TP18                       P F8 NL
O 09 11:06:05                                                  5.795  5.083  4.371
O 00 TP19                       P F8 NL
O 09 11:07:54                                                  6.085  5.180  4.275
S 00 S20                        P F8
S 01 11:08:03 08/25/82  1.000
S 00 S20                        P F8
S 01 11:20:29 08/25/82  1.000
S 00 S20                        P F8
S 01 11:20:45 08/25/82  1.000
O 00 TP19                       P F8 NL
O 09 11:23:52                                                  5.893  4.656  3.419
O 00 TP20                       P F8 NL
O 09 11:27:22                                                  5.997  4.743  3.489
S 00 S21                        P F8
S 01 11:27:28 08/25/82  1.000
O 00 TP20                       P F8 NL
O 09 11:30:30                                                  6.575  5.334  4.093
O 00 TP21                       P F8 NL
O 09 11:33:51                                                  6.509  5.271  4.033
S 00 S22                        P F8
S 01 11:33:58 08/25/82  1.000
O 00 TP21                       P F8 NL
O 09 11:37:36                                                  6.256  5.034  3.812
O 00 TP22                       P F8 NL
```

```
O 09 11:41:10                                                  6.321  5.076  3.831
S 00 S23                          P F8
S 01 11:41:15 08/25/82  1.000
O 00 TP22                         P F8 NL
O 09 11:44:12                                                  6.387  5.142  3.897
O 00 TP23                         P F8 NL
O 09 11:47:22                                                  6.330  5.099  3.868
S 00 S24                          P F8
S 01 11:47:27 08/25/82  1.000
O 00 TP23                         P F8 NL
O 09 11:50:36                                                  6.555  5.202  3.849
O 00 TP24                         P F8 NL
O 09 11:54:22                                                  6.296  4.977  3.658
S 00 S25                          P F8
S 01 11:54:29 08/25/82  1.000
O 00 TP24                         P F8 NL
O 09 11:56:57                                                  6.137  5.685  5.233
O 00 TP25                         P F8 NL
O 09 11:58:25                                                  3.660  2.951  2.242
S 00 S26                          P F8
S 01 11:58:33 08/25/82  1.000
O 00 TP25                         P F8 NL
O 09 13:34:50                                                  6.318  5.069  3.820
O 00 TP26                         P F8 NL
O 09 13:36:19                                                  5.885  4.852  3.819
S 00 S27                          P F8
S 01 13:36:25 08/25/82  1.000
O 00 TP26                         P F8 NL
O 09 13:38:52                                                  6.671  5.386  4.101
O 00 TP27                         P F8 NL
O 09 13:40:02                                                  6.291  5.028  3.765
S 00 S28                          P F8
S 01 13:40:08 08/25/82  1.000
O 00 TP27                         P F8 NL
O 09 13:42:03                                                  5.955  4.707  3.459
O 00 TP28                         P F8 NL
O 09 13:43:02                                                  6.058  4.697  3.336
S 00 S29                          P F8
S 01 13:43:14 08/25/82  1.000
O 00 TP28                         P F8 NL
O 09 13:44:57                                                  6.514  5.289  4.064
O 00 TP29                         P F8 NL
O 09 13:45:55                                                  6.806  5.501  4.196
S 00 S30                          P F8
S 01 13:46:00 08/25/82  1.000
O 00 TP29                         P F8 NL
O 09 13:48:24                                                  5.969  4.644  3.319
O 00 TP30                         P F8 NL
O 09 13:49:09                                                  6.233  4.915  3.597
S 00 S31                          P F8
S 01 13:49:13 08/25/82  1.000
O 00 TP30                         P F8 NL
O 09 13:51:07                                                  6.381  5.139  3.897
O 00 TP31                         P F8 NL
O 09 13:51:54                                                  6.518  5.180  3.842
S 00 S32                          P F8
S 01 13:51:58 08/25/82  1.000
O 00 TP31                         P F8 NL
O 09 13:53:34                                                  6.281  5.057  3.833
O 00 TP32                         P F8 NL
O 09 13:54:16                                                  6.235  4.970  3.705
S 00 S33                          P F8
S 01 13:54:24 08/25/82  1.000
O 00 TP32                         P F8 NL
O 09 13:56:06                                                  6.274  4.993  3.712
O 00 TP33                         P F8 NL
O 09 13:56:58                                                  6.381  5.061  3.741
S 00 S34                          P F8
S 01 13:57:04 08/25/82  1.000
O 00 TP33                         P F8 NL
```

```
O 09 13:59:04                                                  5.894  5.209  4.524
O 00 TP34                      P F8 NL TP20 (SEG B)
O 09 13:59:57                                                  5.684  5.119  4.554
SD00 S35                       P F8
SD01 14:00:06 08/25/82  1.000
C 00 16:33:23 08/26/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S36                       P F8
S 01 16:33:57 08/26/82  1.000
O 00 TP19                      P F8 NL-tp19
O 09 16:54:36                                                  5.207  4.961  4.715
O 09 17:01:29                                                  5.209  4.962  4.715
O 00 MW1                       P F8 MW-bbcwmw4a
O 09 17:00:17                                                  2.813  2.646  2.479
O 00 GND1                      P G1 GND
O 09 17:01:05                                                  4.820  4.654  4.488
C 00 11:11:28 08/27/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
C 00 11:11:29 08/27/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S37                       P F8
S 01 11:11:50 08/27/82  1.000
O 00 TP25                      P F8 NL
O 09 11:15:07                                                          3.445
O 00 BM2                       P F8 pip-f59
O 09 11:16:23                                                          4.306
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING              10 99 100
C 03 00:00:00                    D   0  0  0.0  90  0  0.0
C 03 00:00:00                    D   0  0  0.0  90  0  0.0
C 03 00:00:00                    R 180  0  0.0 270  0  0.0
C 03 00:00:00                    R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S37,BM2,TP34,MW1,GND1
‘↕F2–    7¶“ñ┬‘↕^”– €¤  ¤  x*┘├–┼          “Ò“¼└‘↕^”–♬—   ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834C.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 END OF MISCLOSURE REPORT

    47 OF    74 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    27
 NUMBER OF MEASUREMENTS =    26
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       53

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS
```

STATION	INPUT ELEV.	ADJUSTED ELEV.	ERROR EST.	RESIDUAL
BM1	7.130	7.130	.000	.000 (.0)
BM2	3.050	3.050	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BM2 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
BM1	TP1	-4.716	.000 (.0)	.010
TP1	TP2	.002	.000 (.0)	.010
TP2	TP3	-.144	.000 (.0)	.010
TP3	TP4	-.034	.000 (.0)	.010
TP4	TP5	.438	.000 (.0)	.010
TP5	TP6	.253	.000 (.0)	.010
TP6	TP7	.378	.000 (.0)	.010
TP7	TP8	.278	.000 (.0)	.010
TP8	TP9	-.154	.000 (.0)	.010
TP9	TP10	.829	.000 (.0)	.010
TP10	TP11	-.469	.000 (.0)	.010
TP11	TP12	-.058	.000 (.0)	.010
TP12	TP13	.357	.000 (.0)	.010
TP13	TP14	-2.897	.000 (.0)	.010
TP14	TP15	.019	.000 (.0)	.010
TP15	TP16	-.406	.000 (.0)	.010
TP16	TP17	.090	.000 (.0)	.010
TP17	TP18	.184	.000 (.0)	.010
TP18	TP19	-.097	.000 (.0)	.010
TP19	TP20	-.087	.000 (.0)	.010
TP20	TP21	.063	.000 (.0)	.010
TP21	TP22	-.042	.000 (.0)	.010
TP22	TP23	.043	.000 (.0)	.010
TP23	TP24	.225	.000 (.0)	.010
TP24	TP25	2.734	.000 (.0)	.010
TP25	BM2	-.861	.000 (.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL TP25 - BM2 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	7.130	.000
TP1	2.414	.031
TP2	2.415	.043
TP3	2.271	.051
TP4	2.237	.058
TP5	2.674	.063
TP6	2.927	.067
TP7	3.305	.071
TP8	3.583	.074
TP9	3.428	.076
TP10	4.257	.078
TP11	3.788	.079
TP12	3.729	.080
TP13	4.086	.080
TP14	1.189	.080
TP15	1.207	.079
TP16	.801	.078
TP17	.891	.076
TP18	1.074	.074
TP19	.977	.071
TP20	.890	.067

TP21	.953	.063
TP22	.910	.058
TP23	.953	.051
TP24	1.178	.043
TP25	3.911	.031
BM2	3.050	.000

STANDARD ERROR OF UNIT WEIGHT IS .157
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .157 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834C.CHL
PROJECT NAME IS 1834C

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 12170.000
CLOSURE IN ELEVATION (Z) = -.008
CLOSURE PER STATION = .000
PRECISION = 1 / 1521250.

STATION	ELEVATION (Z)
BM1	7.130
TP1	2.414
TP2	2.415
TP3	2.271
TP4	2.237
TP5	2.674
TP6	2.927
TP7	3.305
TP8	3.583
TP9	3.428
TP10	4.257
TP11	3.788
TP12	3.729
TP13	4.086
TP14	1.189
TP15	1.207
TP16	.801
TP17	.891
TP18	1.074
TP19	.977
TP20	.890
TP21	.953
TP22	.910
TP23	.953
TP24	1.178
TP25	3.911
BM2	3.050

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 2.305 MILES
OVERALL PRECISION = 1 / 1521250.

1834C.CTL
```
G 00 1834C
G 01 BM1      BM1         P F8 IRC F61-147                    0901 83F88
G 02                                7.1300                       .0001
G 01 BM2      BM2         P F8 IRC F-59                       0901 83F88
G 02                                3.0500                       .0001
```

1834C.XYZ
```
G 00         1834C.XYZ
G 01 BM1                      P G1 CMON-f61 1                  0901 83F88
G 02                               7.130                          .000
```

```
G 01 TP1                    P F8 NL                     0901 83F88
G 02                            2.414                      .031
G 01 TP2                    P F8 NL                     0901 83F88
G 02                            2.415                      .043
G 01 TP3                    P F8 NL                     0901 83F88
G 02                            2.271                      .051
G 01 TP4                    P F8 NL                     0901 83F88
G 02                            2.237                      .058
G 01 TP5                    P F8 NL                     0901 83F88
G 02                            2.674                      .063
G 01 TP6                    P F8 NL                     0901 83F88
G 02                            2.927                      .067
G 01 TP7                    P F8 NL                     0901 83F88
G 02                            3.305                      .071
G 01 TP8                    P F8 NL                     0901 83F88
G 02                            3.583                      .074
G 01 TP9                    P F8 NL                     0901 83F88
G 02                            3.428                      .076
G 01 TP10                   P F8 NL                     0901 83F88
G 02                            4.257                      .078
G 01 TP11                   P F8 NL                     0901 83F88
G 02                            3.788                      .079
G 01 TP12                   P F8 NL                     0901 83F88
G 02                            3.729                      .080
G 01 TP13                   P F8 NL                     0901 83F88
G 02                            4.086                      .080
G 01 TP14                   P F8 NL                     0901 83F88
G 02                            1.189                      .080
G 01 TP15                   P F8 NL                     0901 83F88
G 02                            1.207                      .079
G 01 TP16                   P F8 NL                     0901 83F88
G 02                             .801                      .078
G 01 TP17                   P F8 NL                     0901 83F88
G 02                             .891                      .076
G 01 TP18                   P F8 NL                     0901 83F88
G 02                            1.074                      .074
G 01 TP19                   P F8 NL                     0901 83F88
G 02                             .977                      .071
G 01 TP20                   P F8 NL                     0901 83F88
G 02                             .890                      .067
G 01 TP21                   P F8 NL                     0901 83F88
G 02                             .953                      .063
G 01 TP22                   P F8 NL                     0901 83F88
G 02                             .910                      .058
G 01 TP23                   P F8 NL                     0901 83F88
G 02                             .953                      .051
G 01 TP24                   P F8 NL                     0901 83F88
G 02                            1.178                      .043
G 01 TP25                   P F8 NL                     0901 83F88
G 02                            3.911                      .031
G 01 TP26                   P F8 NL                     0901 83F88
G 02                            4.128
G 01 TP27                   P F8 NL                     0901 83F88
G 02                            4.486
G 01 TP28                   P F8 NL                     0901 83F88
G 02                            4.496
G 01 TP29                   P F8 NL                     0901 83F88
G 02                            4.284
G 01 TP30                   P F8 NL                     0901 83F88
G 02                            4.013
G 01 TP31                   P F8 NL                     0901 83F88
G 02                            3.972
G 01 TP32                   P F8 NL                     0901 83F88
G 02                            4.059
G 01 TP33                   P F8 NL                     0901 83F88
G 02                            3.991
G 01 TP34                   P F8 NL TP20 (SEG B)        0901 83F88
G 02                            4.081
G 01 MW1                    P F8 MW-bbcwmw4a            0901 83F88
G 02                            3.292
```

```
G 01 GND1                          P G1 GND                          0901 83F88
G 02                                    1.284
G 01 BM2                           P F8 pip-f59                      0901 83F88
G 02                                    3.050                            .000
```

```
1834C.OBS
H 00 1834C                    08:23:38 08/25/82  08:23:38 08/25/82 ENGLISH   2.55
H 99 biscayne bay wells
C 00 08:24:57 08/25/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S1                        P F8
S 01 08:25:20 08/25/82  1.000
O 00 BM1                       P G1 CMON-f61 1
O 09 08:36:33                                                3.081  2.169  1.257
O 00 TP1                       P F8 NL
O 09 08:39:05                                                8.132  6.885  5.638
S 00 S2                        P F8
S 01 08:39:12 08/25/82  1.000
O 00 TP1                       P F8 NL
O 09 08:42:39                                                6.414  5.205  3.996
O 00 TP2                       P F8 NL
O 09 08:45:46                                                6.430  5.203  3.976
S 00 S3                        P F8
S 01 08:45:53 08/25/82  1.000
O 00 TP2                       P F8 NL
O 09 08:49:02                                                6.124  4.859  3.594
O 00 TP3                       P F8 NL
O 09 08:52:19                                                6.247  5.003  3.759
S 00 S4                        P F8
S 01 08:52:25 08/25/82  1.000
O 00 TP3                       P F8 NL
O 09 08:55:28                                                6.521  5.252  3.983
O 00 TP4                       P F8 NL
O 09 08:58:26                                                6.553  5.286  4.019
S 00 S5                        P F8
S 01 08:58:31 08/25/82  1.000
O 00 TP4                       P F8 NL
O 09 09:01:24                                                6.607  5.378  4.149
O 00 TP5                       P F8 NL
O 09 09:04:31                                                6.196  4.940  3.684
S 00 S6                        P F8
S 01 09:04:37 08/25/82  1.000
O 00 TP5                       P F8 NL
O 09 09:07:36                                                6.024  4.785  3.546
O 00 TP6                       P F8 NL
O 09 09:11:01                                                5.799  4.532  3.265
S 00 S7                        P F8
S 01 09:11:06 08/25/82  1.000
O 00 TP6                       P F8 NL
O 09 09:14:21                                                6.176  4.909  3.642
O 00 TP7                       P F8 NL
O 09 09:17:54                                                5.772  4.531  3.290
S 00 S8                        P F8
S 01 09:18:03 08/25/82  1.000
O 00 TP7                       P F8 NL
O 09 09:23:46                                                5.989  4.739  3.489
O 00 TP8                       P F8 NL
O 09 09:24:58                                                5.735  4.461  3.187
S 00 S9                        P F8
S 01 09:25:05 08/25/82  1.000
O 00 TP8                       P F8 NL
O 09 09:27:54                                                6.416  5.153  3.890
O 00 TP9                       P F8 NL
O 09 09:30:39                                                6.577  5.307  4.037
S 00 S10                       P F8
S 01 09:30:47 08/25/82  1.000
O 00 TP9                       P F8 NL
O 09 09:34:35                                                6.834  5.584  4.334
O 00 TP10                      P F8 NL
O 09 09:37:32                                                6.046  4.755  3.464
S 00 S11                       P F8
S 01 09:37:38 08/25/82  1.000
O 00 TP10                      P F8 NL
O 09 09:40:36                                                5.381  4.118  2.855
O 00 TP11                      P F8 NL
```

```
O 09 09:43:31                                                5.854  4.587  3.320
S 00 S12                        P F8
S 01 09:43:35 08/25/82  1.000
O 00 TP11                       P F8 NL
O 09 09:47:18                                                6.063  4.780  3.497
O 00 TP12                       P F8 NL
O 09 09:50:18                                                6.091  4.838  3.585
S 00 S13                        P F8
S 01 09:50:25 08/25/82  1.000
O 00 TP12                       P F8 NL
O 09 09:53:27                                                6.359  5.059  3.759
O 00 TP13                       P F8 NL
O 09 09:56:11                                                5.997  4.702  3.407
S 00 S14                        P F8
S 01 09:56:16 08/25/82  1.000
O 00 TP13                       P F8 NL
O 09 10:00:20                                                6.650  5.131  3.612
O 00 TP14                       P F8 NL
O 09 10:10:05                                                9.541  8.028  6.515
S 00 S15                        P F8
S 01 10:10:16 08/25/82  1.000
O 00 TP14                       P F8 NL
O 09 10:35:37                                                6.608  5.426  4.244
O 00 TP15                       P F8 NL
O 09 10:39:09                                                6.659  5.407  4.155
S 00 S16                        P F8
S 01 10:39:17 08/25/82  1.000
O 00 TP15                       P F8 NL
O 09 10:43:33                                                6.227  5.011  3.795
O 00 TP16                       P F8 NL
O 09 10:46:43                                                6.668  5.417  4.166
S 00 S17                        P F8
S 01 10:46:57 08/25/82  1.000
O 00 TP16                       P F8 NL
O 09 10:51:17                                                6.745  5.483  4.221
O 00 TP17                       P F8 NL
O 09 10:54:47                                                6.645  5.393  4.141
S 00 S18                        P F8
S 01 10:54:54 08/25/82  1.000
O 00 TP17                       P F8 NL
O 09 10:58:30                                                6.603  5.331  4.059
O 00 TP18                       P F8 NL
O 09 11:01:18                                                6.390  5.147  3.904
S 00 S19                        P F8
S 01 11:01:23 08/25/82  1.000
O 00 TP18                       P F8 NL
O 09 11:06:05                                                5.795  5.083  4.371
O 00 TP19                       P F8 NL
O 09 11:07:54                                                6.085  5.180  4.275
S 00 S20                        P F8
S 01 11:08:03 08/25/82  1.000
S 00 S20                        P F8
S 01 11:20:29 08/25/82  1.000
S 00 S20                        P F8
S 01 11:20:45 08/25/82  1.000
O 00 TP19                       P F8 NL
O 09 11:23:52                                                5.893  4.656  3.419
O 00 TP20                       P F8 NL
O 09 11:27:22                                                5.997  4.743  3.489
S 00 S21                        P F8
S 01 11:27:28 08/25/82  1.000
O 00 TP20                       P F8 NL
O 09 11:30:30                                                6.575  5.334  4.093
O 00 TP21                       P F8 NL
O 09 11:33:51                                                6.509  5.271  4.033
S 00 S22                        P F8
S 01 11:33:58 08/25/82  1.000
O 00 TP21                       P F8 NL
O 09 11:37:36                                                6.256  5.034  3.812
O 00 TP22                       P F8 NL
```

```
O 09 11:41:10                                                6.321  5.076  3.831
S 00 S23                        P F8
S 01 11:41:15 08/25/82  1.000
O 00 TP22                       P F8 NL
O 09 11:44:12                                                6.387  5.142  3.897
O 00 TP23                       P F8 NL
O 09 11:47:22                                                6.330  5.099  3.868
S 00 S24                        P F8
S 01 11:47:27 08/25/82  1.000
O 00 TP23                       P F8 NL
O 09 11:50:36                                                6.555  5.202  3.849
O 00 TP24                       P F8 NL
O 09 11:54:22                                                6.296  4.977  3.658
S 00 S25                        P F8
S 01 11:54:29 08/25/82  1.000
O 00 TP24                       P F8 NL
O 09 11:56:57                                                6.137  5.685  5.233
O 00 TP25                       P F8 NL
O 09 11:58:25                                                3.660  2.951  2.242
S 00 S26                        P F8
S 01 11:58:33 08/25/82  1.000
O 00 TP25                       P F8 NL
O 09 13:34:50                                                6.318  5.069  3.820
O 00 TP26                       P F8 NL
O 09 13:36:19                                                5.885  4.852  3.819
S 00 S27                        P F8
S 01 13:36:25 08/25/82  1.000
O 00 TP26                       P F8 NL
O 09 13:38:52                                                6.671  5.386  4.101
O 00 TP27                       P F8 NL
O 09 13:40:02                                                6.291  5.028  3.765
S 00 S28                        P F8
S 01 13:40:08 08/25/82  1.000
O 00 TP27                       P F8 NL
O 09 13:42:03                                                5.955  4.707  3.459
O 00 TP28                       P F8 NL
O 09 13:43:02                                                6.058  4.697  3.336
S 00 S29                        P F8
S 01 13:43:14 08/25/82  1.000
O 00 TP28                       P F8 NL
O 09 13:44:57                                                6.514  5.289  4.064
O 00 TP29                       P F8 NL
O 09 13:45:55                                                6.806  5.501  4.196
S 00 S30                        P F8
S 01 13:46:00 08/25/82  1.000
O 00 TP29                       P F8 NL
O 09 13:48:24                                                5.969  4.644  3.319
O 00 TP30                       P F8 NL
O 09 13:49:09                                                6.233  4.915  3.597
S 00 S31                        P F8
S 01 13:49:13 08/25/82  1.000
O 00 TP30                       P F8 NL
O 09 13:51:07                                                6.381  5.139  3.897
O 00 TP31                       P F8 NL
O 09 13:51:54                                                6.518  5.180  3.842
S 00 S32                        P F8
S 01 13:51:58 08/25/82  1.000
O 00 TP31                       P F8 NL
O 09 13:53:34                                                6.281  5.057  3.833
O 00 TP32                       P F8 NL
O 09 13:54:16                                                6.235  4.970  3.705
S 00 S33                        P F8
S 01 13:54:24 08/25/82  1.000
O 00 TP32                       P F8 NL
O 09 13:56:06                                                6.274  4.993  3.712
O 00 TP33                       P F8 NL
O 09 13:56:58                                                6.381  5.061  3.741
S 00 S34                        P F8
S 01 13:57:04 08/25/82  1.000
O 00 TP33                       P F8 NL
```

```
O 09 13:59:04                                                  5.894  5.209  4.524
O 00 TP34                      P F8 NL TP20 (SEG B)
O 09 13:59:57                                                  5.684  5.119  4.554
SD00 S35                       P F8
SD01 14:00:06 08/25/82  1.000
C 00 16:33:23 08/26/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S36                       P F8
S 01 16:33:57 08/26/82  1.000
O 00 TP19                      P F8 NL-tp19
O 09 16:54:36                                                  5.207  4.961  4.715
O 09 17:01:29                                                  5.209  4.962  4.715
O 00 MW1                       P F8 MW-bbcwmw4a
O 09 17:00:17                                                  2.813  2.646  2.479
O 00 GND1                      P G1 GND
O 09 17:01:05                                                  4.820  4.654  4.488
C 00 11:11:28 08/27/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
C 00 11:11:29 08/27/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S37                       P F8
S 01 11:11:50 08/27/82  1.000
O 00 TP25                      P F8 NL
O 09 11:15:07                                                          3.445
O 00 BM2                       P F8 pip-f59
O 09 11:16:23                                                          4.306
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S37,BM2,TP34,MW1,GND1
‘↕F2–    7¶“ñ┬‘↕^”– €¤  ¤  x*┘├–┼          “Ò“¼└‘↕^”–♬—   ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834C.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 END OF MISCLOSURE REPORT

    47 OF    74 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    27
 NUMBER OF MEASUREMENTS =    26
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       53

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS
```

STATION	INPUT ELEV.	ADJUSTED ELEV.	ERROR EST.	RESIDUAL
BM1	8.660	8.660	.000	.000 (.0)
BM2	4.580	4.580	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BM1 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
BM1	TP1	-4.716	.000 (.0)	.010
TP1	TP2	.002	.000 (.0)	.010
TP2	TP3	-.144	.000 (.0)	.010
TP3	TP4	-.034	.000 (.0)	.010
TP4	TP5	.438	.000 (.0)	.010
TP5	TP6	.253	.000 (.0)	.010
TP6	TP7	.378	.000 (.0)	.010
TP7	TP8	.278	.000 (.0)	.010
TP8	TP9	-.154	.000 (.0)	.010
TP9	TP10	.829	.000 (.0)	.010
TP10	TP11	-.469	.000 (.0)	.010
TP11	TP12	-.058	.000 (.0)	.010
TP12	TP13	.357	.000 (.0)	.010
TP13	TP14	-2.897	.000 (.0)	.010
TP14	TP15	.019	.000 (.0)	.010
TP15	TP16	-.406	.000 (.0)	.010
TP16	TP17	.090	.000 (.0)	.010
TP17	TP18	.184	.000 (.0)	.010
TP18	TP19	-.097	.000 (.0)	.010
TP19	TP20	-.087	.000 (.0)	.010
TP20	TP21	.063	.000 (.0)	.010
TP21	TP22	-.042	.000 (.0)	.010
TP22	TP23	.043	.000 (.0)	.010
TP23	TP24	.225	.000 (.0)	.010
TP24	TP25	2.734	.000 (.0)	.010
TP25	BM2	-.861	.000 (.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL TP22 - TP23 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	8.660	.000
TP1	3.944	.031
TP2	3.945	.043
TP3	3.801	.051
TP4	3.767	.058
TP5	4.204	.063
TP6	4.457	.067
TP7	4.835	.071
TP8	5.113	.074
TP9	4.958	.076
TP10	5.787	.078
TP11	5.318	.079
TP12	5.259	.080
TP13	5.616	.080
TP14	2.719	.080
TP15	2.737	.079
TP16	2.331	.078
TP17	2.421	.076
TP18	2.604	.074
TP19	2.507	.071
TP20	2.420	.067

TP21	2.483	.063
TP22	2.440	.058
TP23	2.483	.051
TP24	2.708	.043
TP25	5.441	.031
BM2	4.580	.000

STANDARD ERROR OF UNIT WEIGHT IS .157
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .157 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834C.CHL

PROJECT NAME IS 1834C

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 12170.000
CLOSURE IN ELEVATION (Z) = -.008
CLOSURE PER STATION = .000
PRECISION = 1 / 1521250.

STATION	ELEVATION (Z)
BM1	8.660
TP1	3.944
TP2	3.945
TP3	3.801
TP4	3.767
TP5	4.204
TP6	4.457
TP7	4.835
TP8	5.113
TP9	4.958
TP10	5.787
TP11	5.318
TP12	5.259
TP13	5.616
TP14	2.719
TP15	2.737
TP16	2.331
TP17	2.421
TP18	2.604
TP19	2.507
TP20	2.420
TP21	2.483
TP22	2.440
TP23	2.483
TP24	2.708
TP25	5.441
BM2	4.580

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 2.305 MILES
OVERALL PRECISION = 1 / 1521250.

1834C.CTL

```
G 00 1834C
G 01 BM1      BM1         P F8 IRC F61-147                  0901 83F29
G 02                            8.6600                        .0001
G 01 BM2      BM2         P F8 IRC F-59                     0901 83F29
G 02                            4.5800                        .0001
```

1834C.XYZ

```
G 00         1834C.XYZ
G 01 BM1                     P G1 CMON-f61 1                0901 83F29
```

```
G 02                                    8.660                                 .000
G 01 TP1                           P F8 NL                              0901 83F29
G 02                                    3.944                                 .031
G 01 TP2                           P F8 NL                              0901 83F29
G 02                                    3.945                                 .043
G 01 TP3                           P F8 NL                              0901 83F29
G 02                                    3.801                                 .051
G 01 TP4                           P F8 NL                              0901 83F29
G 02                                    3.767                                 .058
G 01 TP5                           P F8 NL                              0901 83F29
G 02                                    4.204                                 .063
G 01 TP6                           P F8 NL                              0901 83F29
G 02                                    4.457                                 .067
G 01 TP7                           P F8 NL                              0901 83F29
G 02                                    4.835                                 .071
G 01 TP8                           P F8 NL                              0901 83F29
G 02                                    5.113                                 .074
G 01 TP9                           P F8 NL                              0901 83F29
G 02                                    4.958                                 .076
G 01 TP10                          P F8 NL                              0901 83F29
G 02                                    5.787                                 .078
G 01 TP11                          P F8 NL                              0901 83F29
G 02                                    5.318                                 .079
G 01 TP12                          P F8 NL                              0901 83F29
G 02                                    5.259                                 .080
G 01 TP13                          P F8 NL                              0901 83F29
G 02                                    5.616                                 .080
G 01 TP14                          P F8 NL                              0901 83F29
G 02                                    2.719                                 .080
G 01 TP15                          P F8 NL                              0901 83F29
G 02                                    2.737                                 .079
G 01 TP16                          P F8 NL                              0901 83F29
G 02                                    2.331                                 .078
G 01 TP17                          P F8 NL                              0901 83F29
G 02                                    2.421                                 .076
G 01 TP18                          P F8 NL                              0901 83F29
G 02                                    2.604                                 .074
G 01 TP19                          P F8 NL                              0901 83F29
G 02                                    2.507                                 .071
G 01 TP20                          P F8 NL                              0901 83F29
G 02                                    2.420                                 .067
G 01 TP21                          P F8 NL                              0901 83F29
G 02                                    2.483                                 .063
G 01 TP22                          P F8 NL                              0901 83F29
G 02                                    2.440                                 .058
G 01 TP23                          P F8 NL                              0901 83F29
G 02                                    2.483                                 .051
G 01 TP24                          P F8 NL                              0901 83F29
G 02                                    2.708                                 .043
G 01 TP25                          P F8 NL                              0901 83F29
G 02                                    5.441                                 .031
G 01 TP26                          P F8 NL                              0901 83F29
G 02                                    5.658
G 01 TP27                          P F8 NL                              0901 83F29
G 02                                    6.016
G 01 TP28                          P F8 NL                              0901 83F29
G 02                                    6.026
G 01 TP29                          P F8 NL                              0901 83F29
G 02                                    5.814
G 01 TP30                          P F8 NL                              0901 83F29
G 02                                    5.543
G 01 TP31                          P F8 NL                              0901 83F29
G 02                                    5.502
G 01 TP32                          P F8 NL                              0901 83F29
G 02                                    5.589
G 01 TP33                          P F8 NL                              0901 83F29
G 02                                    5.521
G 01 TP34                          P F8 NL TP20 (SEG B)                 0901 83F29
G 02                                    5.611
G 01 MW1                           P F8 MW-bbcwmw4a                     0901 83F29
```

```
G 02                                    4.822
G 01 GND1                         P G1 GND                          0901 83F29
G 02                                    2.814
G 01 BM2                          P F8 pip-f59                      0901 83F29
G 02                                    4.580                          .000
```

```
1834D.OBS
H 00 1834D                    07:11:37 11/13/95  07:11:37 11/13/95 ENGLISH   2.55
H 99 BISCAYNE BAY CANAL
C 00 07:14:54 11/13/95  90 30.0 000001 DF  TMD JH
C 01 WILD       NA2000     90788            100
S 00 S1                        P F8
S 01 07:15:46 11/13/95  1.000
C 00 05:39:16 11/15/95  90 30.0 000001 DF  JH  NL
C 01 WILD       NA2000     91119            100
C 13 08:25:04  5.38  6.12  5.49  6.23
S 00 S1                        P G1
S 01 08:31:28 11/15/95  1.000
O 00 TP35                      P G1 NL-TP#35 SW 87AVE FB682 P7
O 09 08:39:30                                                  8.835  7.284  5.733
O 00 D2                        P G1 NL-TP#1
O 09 08:50:12                                                  6.630  5.335  4.040
S 00 S3                        P G1
S 01 08:58:12 11/15/95  1.000
O 00 D2                        P G1 NL-TP#1
O 09 08:58:31                                                  6.345  5.032  3.719
O 00 D3                        P G1 NL-TP#2
O 09 09:01:47                                                  5.900  4.981  4.062
S 00 S4                        P G1
S 01 09:05:18 11/15/95  1.000
O 00 D3                        P G1 NL-TP#2
O 09 09:06:03                                                  5.433  4.180  2.927
O 00 D4                        P G1 NL-TP#3
O 09 09:08:03                                                  6.239  5.053  3.867
S 00 S5                        P G1
S 01 09:11:00 11/15/95  1.000
O 00 D4                        P G1 NL-TP#3
O 09 09:11:17                                                  6.678  5.537  4.396
O 00 D5                        P G1 NL-TP#4
O 09 09:13:08                                                  6.693  5.404  4.115
S 00 S6                        P G1
S 01 09:16:11 11/15/95  1.000
O 00 D5                        P G1 NL-TP#4
O 09 09:16:33                                                  6.485  5.311  4.137
O 00 D6                        P G1 NL-TP#5
O 09 09:22:09                                                  6.297  4.986  3.675
S 00 S7                        P G1
S 01 09:26:45 11/15/95  1.000
O 00 D6                        P G1 NL-TP#5
O 09 09:27:19                                                  7.666  6.432  5.198
O 00 D7                        P G1 NL-TP#6
O 09 09:30:07                                                  7.097  5.598  4.099
S 00 S8                        P G1
S 01 09:37:55 11/15/95  1.000
O 00 D7                        P G1 NL-TP#6
O 09 09:38:29                                                  6.128  5.675  5.222
O 00 D8                        P G1 NL-TP#7
O 09 09:40:33                                                  6.176  5.657  5.138
S 00 S9                        P G1
S 01 09:47:13 11/15/95  1.000
O 00 D8                        P G1 NL-TP#7
O 09 09:47:42                                                  4.339  3.845  3.351
O 00 D9                        P G1 NL-TP#8
O 09 09:49:26                                                  6.709  6.315  5.921
S 00 S10                       P G1
S 01 09:51:55 11/15/95  1.000
O 00 D9                        P G1 NL-TP#8
O 09 09:52:20                                                  4.812  4.532  4.252
O 00 D10                       P G1 NL-TP#9
O 09 09:53:19                                                  5.323  5.074  4.825
S 00 S11                       P G1
S 01 09:55:10 11/15/95  1.000
O 00 D10                       P G1 NL-TP#9
O 09 09:55:35                                                  4.017  3.825  3.633
O 00 D11                       P G1 NL-TP#10
O 09 09:56:28                                                  4.068  3.856  3.644
```

```
S 00 S12                          P G1
S 01 09:58:38 11/15/95  1.000
O 00 D11                          P G1 NL-TP#10
O 09 09:59:05                                          5.054  4.465  3.876
O 00 D12                          P G1 NL-TP#11
O 09 10:01:45                                          4.688  3.976  3.264
S 00 S13                          P G1
S 01 10:03:55 11/15/95  1.000
O 00 D12                          P G1 NL-TP#11
O 09 10:04:35                                          5.966  5.321  4.676
O 00 D13                          P G1 NL-TP#12
O 09 10:06:19                                          5.909  5.305  4.701
S 00 S14                          P G1
S 01 10:10:33 11/15/95  1.000
O 00 D13                          P G1 NL-TP#12
O 09 10:12:59                                          6.207  5.519  4.831
O 00 D14                          P G1 NL-TP#13
O 09 10:14:07                                          6.093  5.534  4.975
S 00 S15                          P G1
S 01 10:15:41 11/15/95  1.000
O 00 D14                          P G1 NL-TP#13
O 09 10:16:11                                          4.869  4.148  3.427
O 00 D15                          P G1 NL-TP#14
O 09 10:18:38                                          5.217  4.636  4.055
S 00 S16                          P G1
S 01 10:20:11 11/15/95  1.000
O 00 D15                          P G1 NL-TP#14
O 09 10:20:54                                          3.997  3.799  3.601
O 00 D16                          P G1 NL-TP#15
O 09 10:21:43                                          3.973  3.767  3.561
S 00 S17                          P G1
S 01 10:22:54 11/15/95  1.000
O 00 D16                          P G1 NL-TP#15
O 09 10:23:22                                          5.285  5.035  4.785
O 00 D17                          P G1 NL-TP#16
O 09 10:24:29                                          4.770  4.492  4.214
S 00 S18                          P G1
S 01 10:25:41 11/15/95  1.000
O 00 D17                          P G1 NL-TP#16
O 09 10:26:10                                          7.220  6.716  6.212
O 00 D18                          P G1 NL-TP#17
O 09 10:27:38                                          4.632  4.249  3.866
S 00 S19                          P G1
S 01 10:29:15 11/15/95  1.000
O 00 D18                          P G1 NL-TP#17
O 09 10:29:37                                          5.728  5.249  4.770
O 00 D19                          P G1 NL-TP#18
O 09 10:32:31                                          5.760  5.267  4.774
S 00 S20                          P G1
S 01 10:58:41 11/15/95  1.000
O 00 D19                          P G1 NL-TP#18
O 09 10:59:17                                          6.401  5.036  3.671
O 00 D20                          P G1 NL-TP#19
O 09 11:01:12                                          7.242  5.870  4.498
S 00 S21                          P G1
S 01 11:03:43 11/15/95  1.000
O 00 D20                          P G1 NL-TP#19
O 09 11:04:14                                          6.063  4.873  3.683
O 00 D21                          P G1 NL-TP#20
O 09 11:06:10                                          6.490  5.197  3.904
S 00 S22                          P G1
S 01 11:08:45 11/15/95  1.000
O 00 D21                          P G1 NL-TP#20
O 09 11:09:12                                          6.112  5.086  4.060
O 00 D22                          P G1 NL-TP#21
O 09 11:10:51                                          6.625  5.218  3.811
S 00 S23                          P G1
S 01 11:13:25 11/15/95  1.000
O 00 D22                          P G1 NL-TP#21
O 09 11:13:44                                          5.977  4.860  3.743
```

```
O 00 D23                        P G1 NL-TP#22
O 09 11:16:10                                                  5.305  3.985  2.665
S 00 S24                        P G1
S 01 11:18:44 11/15/95  1.000
O 00 D23                        P G1 NL-TP#22
O 09 11:19:17                                                  5.359  4.437  3.515
O 00 D24                        P G1 NL-TP#23
O 09 11:20:54                                                  5.831  4.489  3.147
S 00 S25                        P G1
S 01 11:26:29 11/15/95  1.000
O 00 D24                        P G1 NL-TP#23
O 09 11:26:57                                                  6.663  5.898  5.133
O 00 TP34                       P G1 NL-TP#34 SW 87AVE FB682 P7
O 09 11:29:00                                                  7.029  6.246  5.463
S 00 S26                        P F8
S 01 11:48:03 11/15/95  1.000
O 00 D13                        P G1 NL-TP#12
O 09 11:56:41                                                  4.810  4.736  4.662
O 00 MW1                        P G1 MW-BBCWMW1A
O 99 NORTH RIM OF OUTER CASING
O 09 11:58:42                                                  4.306  4.210  4.114
O 00 MW2                        P G1 MW-BBCWMW1A
O 99 NORTH SIBE OF 2" PVC WELL
O 09 12:00:31                                                  4.489  4.391  4.293
S 00 S27                        P F8
S 01 12:01:51 11/15/95  1.000
O 00 MW2                        P G1 MW-BBCWMW1A
O 99 NORTH SIBE OF 2" PVC WELL
O 09 12:03:01                                                  4.511  4.413  4.315
O 00 D13                        P G1 NL-TP#12
O 09 12:03:34                                                  4.833  4.759  4.685
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S27,D25,MW2
‘↕F2–    7¶“ñ┬‘↕^”– €¤  ¤  x*Ì◀–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834D.1D
 MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 D13      - MW2             .001
 END OF MISCLOSURE REPORT

    28 OF    53 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    25
```

NUMBER OF MEASUREMENTS = 24
NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS = 49

RESULTS OF ADJUSTMENT

BENCHMARK ELEVATION RESIDUALS

STATION	INPUT ELEV.	ADJUSTED ELEV.	ERROR EST.	RESIDUAL
TP35	3.668	3.668	.000	.000 (.0)
TP34	5.263	5.263	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION TP35 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
TP35	D2	1.949	.000 (.0)	.010
D2	D3	.051	.000 (.0)	.010
D3	D4	-.873	.000 (.0)	.010
D4	D5	.133	.000 (.0)	.010
D5	D6	.325	.000 (.0)	.010
D6	D7	.834	.000 (.0)	.010
D7	D8	.018	.000 (.0)	.010
D8	D9	-2.470	.000 (.0)	.010
D9	D10	-.542	.000 (.0)	.010
D10	D11	-.031	.000 (.0)	.010
D11	D12	.489	.000 (.0)	.010
D12	D13	.016	.000 (.0)	.010
D13	D14	-.015	.000 (.0)	.010
D14	D15	-.488	.000 (.0)	.010
D15	D16	.032	.000 (.0)	.010
D16	D17	.543	.000 (.0)	.010
D17	D18	2.467	.000 (.0)	.010
D18	D19	-.018	.000 (.0)	.010
D19	D20	-.834	.000 (.0)	.010
D20	D21	-.324	.000 (.0)	.010
D21	D22	-.132	.000 (.0)	.010
D22	D23	.875	.000 (.0)	.010
D23	D24	-.052	.000 (.0)	.010
D24	TP34	-.348	.000 (.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL D23 - D24 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
TP35	3.668	.000
D2	5.617	.040
D3	5.667	.055
D4	4.794	.066
D5	4.926	.075
D6	5.251	.081
D7	6.084	.087
D8	6.102	.091
D9	3.632	.094
D10	3.089	.097
D11	3.058	.099
D12	3.546	.100
D13	3.562	.100
D14	3.547	.100
D15	3.058	.099
D16	3.090	.097
D17	3.632	.094

D18	6.099	.091
D19	6.081	.087
D20	5.246	.081
D21	4.922	.075
D22	4.789	.066
D23	5.664	.055
D24	5.611	.040
TP34	5.263	.000

STANDARD ERROR OF UNIT WEIGHT IS .204
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .204 < 1.960

1834D.CHL

PROJECT NAME IS 1834D

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 7969.500
CLOSURE IN ELEVATION (Z) = -.010
CLOSURE PER STATION = .000
PRECISION = 1 / 796950.

STATION	ELEVATION (Z)
TP35	3.668
D2	5.617
D3	5.667
D4	4.794
D5	4.926
D6	5.251
D7	6.084
D8	6.102
D9	3.632
D10	3.089
D11	3.058
D12	3.546
D13	3.562
D14	3.547
D15	3.058
D16	3.090
D17	3.632
D18	6.099
D19	6.081
D20	5.246
D21	4.922
D22	4.789
D23	5.664
D24	5.611
TP34	5.263

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 1.509 MILES
OVERALL PRECISION = 1 / 796950.

1834D.CTL
G 00 1834D
G 01 TP35 TP35 0901 83F88
G 02 3.6680 .0001
G 01 TP34 TP34 0901 83F88
G 02 5.2630 .0001

1834D.XYZ
G 00 1834D.XYZ
G 01 TP35 P G1 NL-TP#35 SW 87AVE FB682 0901 83F88
G 02 3.668 .000

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G 01 D2                          P G1 NL-TP#1                    0901 83F88
G 02                                5.617                           .040
G 01 D3                          P G1 NL-TP#2                    0901 83F88
G 02                                5.667                           .055
G 01 D4                          P G1 NL-TP#3                    0901 83F88
G 02                                4.794                           .066
G 01 D5                          P G1 NL-TP#4                    0901 83F88
G 02                                4.926                           .075
G 01 D6                          P G1 NL-TP#5                    0901 83F88
G 02                                5.251                           .081
G 01 D7                          P G1 NL-TP#6                    0901 83F88
G 02                                6.084                           .087
G 01 D8                          P G1 NL-TP#7                    0901 83F88
G 02                                6.102                           .091
G 01 D9                          P G1 NL-TP#8                    0901 83F88
G 02                                3.632                           .094
G 01 D10                         P G1 NL-TP#9                    0901 83F88
G 02                                3.089                           .097
G 01 D11                         P G1 NL-TP#10                   0901 83F88
G 02                                3.058                           .099
G 01 D12                         P G1 NL-TP#11                   0901 83F88
G 02                                3.546                           .100
G 01 D13                         P G1 NL-TP#12                   0901 83F88
G 02                                3.562                           .100
G 01 D14                         P G1 NL-TP#13                   0901 83F88
G 02                                3.547                           .100
G 01 D15                         P G1 NL-TP#14                   0901 83F88
G 02                                3.058                           .099
G 01 D16                         P G1 NL-TP#15                   0901 83F88
G 02                                3.090                           .097
G 01 D17                         P G1 NL-TP#16                   0901 83F88
G 02                                3.632                           .094
G 01 D18                         P G1 NL-TP#17                   0901 83F88
G 02                                6.099                           .091
G 01 D19                         P G1 NL-TP#18                   0901 83F88
G 02                                6.081                           .087
G 01 D20                         P G1 NL-TP#19                   0901 83F88
G 02                                5.246                           .081
G 01 D21                         P G1 NL-TP#20                   0901 83F88
G 02                                4.922                           .075
G 01 D22                         P G1 NL-TP#21                   0901 83F88
G 02                                4.789                           .066
G 01 D23                         P G1 NL-TP#22                   0901 83F88
G 02                                5.664                           .055
G 01 D24                         P G1 NL-TP#23                   0901 83F88
G 02                                5.611                           .040
G 01 TP34                        P G1 NL-TP#34 SW 87AVE FB682    0901 83F88
G 02                                5.263                           .000
G 01 MW1                         P G1 MW-BBCWMW1A                0901 83F88
G 99 NORTH RIM OF OUTER CASING
G 02                                4.088
G 01 MW2                         P G1 MW-BBCWMW1A                0901 83F88
G 99 NORTH SIBE OF 2" PVC WELL
G 02                                3.908
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1834D.OBS
H 00 1834D                    07:11:37 11/13/95  07:11:37 11/13/95 ENGLISH   2.55
H 99 BISCAYNE BAY CANAL
C 00 07:14:54 11/13/95  90 30.0 000001 DF  TMD JH
C 01 WILD       NA2000     90788            100
S 00 S1                        P F8
S 01 07:15:46 11/13/95  1.000
C 00 05:39:16 11/15/95  90 30.0 000001 DF  JH  NL
C 01 WILD       NA2000     91119            100
C 13 08:25:04  5.38  6.12  5.49  6.23
S 00 S1                        P G1
S 01 08:31:28 11/15/95  1.000
O 00 TP35                      P G1 NL-TP#35 SW 87AVE FB682 P7
O 09 08:39:30                                                  8.835  7.284  5.733
O 00 D2                        P G1 NL-TP#1
O 09 08:50:12                                                  6.630  5.335  4.040
S 00 S3                        P G1
S 01 08:58:12 11/15/95  1.000
O 00 D2                        P G1 NL-TP#1
O 09 08:58:31                                                  6.345  5.032  3.719
O 00 D3                        P G1 NL-TP#2
O 09 09:01:47                                                  5.900  4.981  4.062
S 00 S4                        P G1
S 01 09:05:18 11/15/95  1.000
O 00 D3                        P G1 NL-TP#2
O 09 09:06:03                                                  5.433  4.180  2.927
O 00 D4                        P G1 NL-TP#3
O 09 09:08:03                                                  6.239  5.053  3.867
S 00 S5                        P G1
S 01 09:11:00 11/15/95  1.000
O 00 D4                        P G1 NL-TP#3
O 09 09:11:17                                                  6.678  5.537  4.396
O 00 D5                        P G1 NL-TP#4
O 09 09:13:08                                                  6.693  5.404  4.115
S 00 S6                        P G1
S 01 09:16:11 11/15/95  1.000
O 00 D5                        P G1 NL-TP#4
O 09 09:16:33                                                  6.485  5.311  4.137
O 00 D6                        P G1 NL-TP#5
O 09 09:22:09                                                  6.297  4.986  3.675
S 00 S7                        P G1
S 01 09:26:45 11/15/95  1.000
O 00 D6                        P G1 NL-TP#5
O 09 09:27:19                                                  7.666  6.432  5.198
O 00 D7                        P G1 NL-TP#6
O 09 09:30:07                                                  7.097  5.598  4.099
S 00 S8                        P G1
S 01 09:37:55 11/15/95  1.000
O 00 D7                        P G1 NL-TP#6
O 09 09:38:29                                                  6.128  5.675  5.222
O 00 D8                        P G1 NL-TP#7
O 09 09:40:33                                                  6.176  5.657  5.138
S 00 S9                        P G1
S 01 09:47:13 11/15/95  1.000
O 00 D8                        P G1 NL-TP#7
O 09 09:47:42                                                  4.339  3.845  3.351
O 00 D9                        P G1 NL-TP#8
O 09 09:49:26                                                  6.709  6.315  5.921
S 00 S10                       P G1
S 01 09:51:55 11/15/95  1.000
O 00 D9                        P G1 NL-TP#8
O 09 09:52:20                                                  4.812  4.532  4.252
O 00 D10                       P G1 NL-TP#9
O 09 09:53:19                                                  5.323  5.074  4.825
S 00 S11                       P G1
S 01 09:55:10 11/15/95  1.000
O 00 D10                       P G1 NL-TP#9
O 09 09:55:35                                                  4.017  3.825  3.633
O 00 D11                       P G1 NL-TP#10
O 09 09:56:28                                                  4.068  3.856  3.644
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S 00 S12                        P G1
S 01 09:58:38 11/15/95  1.000
O 00 D11                        P G1 NL-TP#10
O 09 09:59:05                                          5.054  4.465  3.876
O 00 D12                        P G1 NL-TP#11
O 09 10:01:45                                          4.688  3.976  3.264
S 00 S13                        P G1
S 01 10:03:55 11/15/95  1.000
O 00 D12                        P G1 NL-TP#11
O 09 10:04:35                                          5.966  5.321  4.676
O 00 D13                        P G1 NL-TP#12
O 09 10:06:19                                          5.909  5.305  4.701
S 00 S14                        P G1
S 01 10:10:33 11/15/95  1.000
O 00 D13                        P G1 NL-TP#12
O 09 10:12:59                                          6.207  5.519  4.831
O 00 D14                        P G1 NL-TP#13
O 09 10:14:07                                          6.093  5.534  4.975
S 00 S15                        P G1
S 01 10:15:41 11/15/95  1.000
O 00 D14                        P G1 NL-TP#13
O 09 10:16:11                                          4.869  4.148  3.427
O 00 D15                        P G1 NL-TP#14
O 09 10:18:38                                          5.217  4.636  4.055
S 00 S16                        P G1
S 01 10:20:11 11/15/95  1.000
O 00 D15                        P G1 NL-TP#14
O 09 10:20:54                                          3.997  3.799  3.601
O 00 D16                        P G1 NL-TP#15
O 09 10:21:43                                          3.973  3.767  3.561
S 00 S17                        P G1
S 01 10:22:54 11/15/95  1.000
O 00 D16                        P G1 NL-TP#15
O 09 10:23:22                                          5.285  5.035  4.785
O 00 D17                        P G1 NL-TP#16
O 09 10:24:29                                          4.770  4.492  4.214
S 00 S18                        P G1
S 01 10:25:41 11/15/95  1.000
O 00 D17                        P G1 NL-TP#16
O 09 10:26:10                                          7.220  6.716  6.212
O 00 D18                        P G1 NL-TP#17
O 09 10:27:38                                          4.632  4.249  3.866
S 00 S19                        P G1
S 01 10:29:15 11/15/95  1.000
O 00 D18                        P G1 NL-TP#17
O 09 10:29:37                                          5.728  5.249  4.770
O 00 D19                        P G1 NL-TP#18
O 09 10:32:31                                          5.760  5.267  4.774
S 00 S20                        P G1
S 01 10:58:41 11/15/95  1.000
O 00 D19                        P G1 NL-TP#18
O 09 10:59:17                                          6.401  5.036  3.671
O 00 D20                        P G1 NL-TP#19
O 09 11:01:12                                          7.242  5.870  4.498
S 00 S21                        P G1
S 01 11:03:43 11/15/95  1.000
O 00 D20                        P G1 NL-TP#19
O 09 11:04:14                                          6.063  4.873  3.683
O 00 D21                        P G1 NL-TP#20
O 09 11:06:10                                          6.490  5.197  3.904
S 00 S22                        P G1
S 01 11:08:45 11/15/95  1.000
O 00 D21                        P G1 NL-TP#20
O 09 11:09:12                                          6.112  5.086  4.060
O 00 D22                        P G1 NL-TP#21
O 09 11:10:51                                          6.625  5.218  3.811
S 00 S23                        P G1
S 01 11:13:25 11/15/95  1.000
O 00 D22                        P G1 NL-TP#21
O 09 11:13:44                                          5.977  4.860  3.743
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O 00 D23                        P G1 NL-TP#22
O 09 11:16:10                                                  5.305  3.985  2.665
S 00 S24                        P G1
S 01 11:18:44 11/15/95  1.000
O 00 D23                        P G1 NL-TP#22
O 09 11:19:17                                                  5.359  4.437  3.515
O 00 D24                        P G1 NL-TP#23
O 09 11:20:54                                                  5.831  4.489  3.147
S 00 S25                        P G1
S 01 11:26:29 11/15/95  1.000
O 00 D24                        P G1 NL-TP#23
O 09 11:26:57                                                  6.663  5.898  5.133
O 00 TP34                       P G1 NL-TP#34 SW 87AVE FB682 P7
O 09 11:29:00                                                  7.029  6.246  5.463
S 00 S26                        P F8
S 01 11:48:03 11/15/95  1.000
O 00 D13                        P G1 NL-TP#12
O 09 11:56:41                                                  4.810  4.736  4.662
O 00 MW1                        P G1 MW-BBCWMW1A
O 99 NORTH RIM OF OUTER CASING
O 09 11:58:42                                                  4.306  4.210  4.114
O 00 MW2                        P G1 MW-BBCWMW1A
O 99 NORTH SIBE OF 2" PVC WELL
O 09 12:00:31                                                  4.489  4.391  4.293
S 00 S27                        P F8
S 01 12:01:51 11/15/95  1.000
O 00 MW2                        P G1 MW-BBCWMW1A
O 99 NORTH SIBE OF 2" PVC WELL
O 09 12:03:01                                                  4.511  4.413  4.315
O 00 D13                        P G1 NL-TP#12
O 09 12:03:34                                                  4.833  4.759  4.685
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S27,D25,MW2
‘↕F2–    7¶“ñ┬‘↕^”– €¤  ¤  x*Ì◀–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
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1834D.1D
 MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 D13      - MW2             .001
 END OF MISCLOSURE REPORT

    28 OF    53 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    25
```

NUMBER OF MEASUREMENTS = 24
NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS = 49

RESULTS OF ADJUSTMENT

BENCHMARK ELEVATION RESIDUALS

STATION	INPUT ELEV.	ADJUSTED ELEV.	ERROR EST.	RESIDUAL
TP35	5.188	5.188	.000	.000 (.0)
TP34	6.783	6.783	.000	.000 (.0)

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION TP35 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL	EST. ERROR
TP35	D2	1.949	.000 (.0)	.010
D2	D3	.051	.000 (.0)	.010
D3	D4	-.873	.000 (.0)	.010
D4	D5	.133	.000 (.0)	.010
D5	D6	.325	.000 (.0)	.010
D6	D7	.834	.000 (.0)	.010
D7	D8	.018	.000 (.0)	.010
D8	D9	-2.470	.000 (.0)	.010
D9	D10	-.542	.000 (.0)	.010
D10	D11	-.031	.000 (.0)	.010
D11	D12	.489	.000 (.0)	.010
D12	D13	.016	.000 (.0)	.010
D13	D14	-.015	.000 (.0)	.010
D14	D15	-.488	.000 (.0)	.010
D15	D16	.032	.000 (.0)	.010
D16	D17	.543	.000 (.0)	.010
D17	D18	2.467	.000 (.0)	.010
D18	D19	-.018	.000 (.0)	.010
D19	D20	-.834	.000 (.0)	.010
D20	D21	-.324	.000 (.0)	.010
D21	D22	-.132	.000 (.0)	.010
D22	D23	.875	.000 (.0)	.010
D23	D24	-.052	.000 (.0)	.010
D24	TP34	-.348	.000 (.0)	.010

ELEV. DIFF. RMS ERROR = .000 SNOOP RMS = .0
MAX. ELEV. DIFF. RESIDUAL D24 - TP34 OF .000

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
TP35	5.188	.000
D2	7.137	.040
D3	7.187	.055
D4	6.314	.066
D5	6.446	.075
D6	6.771	.081
D7	7.604	.087
D8	7.622	.091
D9	5.152	.094
D10	4.609	.097
D11	4.578	.099
D12	5.066	.100
D13	5.082	.100
D14	5.067	.100
D15	4.578	.099
D16	4.610	.097
D17	5.152	.094

D18	7.619	.091
D19	7.601	.087
D20	6.766	.081
D21	6.442	.075
D22	6.309	.066
D23	7.184	.055
D24	7.131	.040
TP34	6.783	.000

STANDARD ERROR OF UNIT WEIGHT IS .204
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .204 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834D.CHL

PROJECT NAME IS 1834D

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 7969.500
CLOSURE IN ELEVATION (Z) = -.010
CLOSURE PER STATION = .000
PRECISION = 1 / 796950.

STATION	ELEVATION (Z)
TP35	5.188
D2	7.137
D3	7.187
D4	6.314
D5	6.446
D6	6.771
D7	7.604
D8	7.622
D9	5.152
D10	4.609
D11	4.578
D12	5.066
D13	5.082
D14	5.067
D15	4.578
D16	4.610
D17	5.152
D18	7.619
D19	7.601
D20	6.766
D21	6.442
D22	6.309
D23	7.184
D24	7.131
TP34	6.783

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 1.509 MILES
OVERALL PRECISION = 1 / 796950.

1834D.CTL
G 00 1834D
G 01 TP35 TP35 0901 83F29
G 02 5.1880 .0001
G 01 TP34 TP34 0901 83F29
G 02 6.7830 .0001

1834D.XYZ
G 00 1834D.XYZ
G 01 TP35 P G1 NL-TP#35 SW 87AVE FB682 0901 83F29

```
G 02                              5.188                      .000
G 01 D2                       P G1 NL-TP#1                  0901 83F29
G 02                              7.137                      .040
G 01 D3                       P G1 NL-TP#2                  0901 83F29
G 02                              7.187                      .055
G 01 D4                       P G1 NL-TP#3                  0901 83F29
G 02                              6.314                      .066
G 01 D5                       P G1 NL-TP#4                  0901 83F29
G 02                              6.446                      .075
G 01 D6                       P G1 NL-TP#5                  0901 83F29
G 02                              6.771                      .081
G 01 D7                       P G1 NL-TP#6                  0901 83F29
G 02                              7.604                      .087
G 01 D8                       P G1 NL-TP#7                  0901 83F29
G 02                              7.622                      .091
G 01 D9                       P G1 NL-TP#8                  0901 83F29
G 02                              5.152                      .094
G 01 D10                      P G1 NL-TP#9                  0901 83F29
G 02                              4.609                      .097
G 01 D11                      P G1 NL-TP#10                 0901 83F29
G 02                              4.578                      .099
G 01 D12                      P G1 NL-TP#11                 0901 83F29
G 02                              5.066                      .100
G 01 D13                      P G1 NL-TP#12                 0901 83F29
G 02                              5.082                      .100
G 01 D14                      P G1 NL-TP#13                 0901 83F29
G 02                              5.067                      .100
G 01 D15                      P G1 NL-TP#14                 0901 83F29
G 02                              4.578                      .099
G 01 D16                      P G1 NL-TP#15                 0901 83F29
G 02                              4.610                      .097
G 01 D17                      P G1 NL-TP#16                 0901 83F29
G 02                              5.152                      .094
G 01 D18                      P G1 NL-TP#17                 0901 83F29
G 02                              7.619                      .091
G 01 D19                      P G1 NL-TP#18                 0901 83F29
G 02                              7.601                      .087
G 01 D20                      P G1 NL-TP#19                 0901 83F29
G 02                              6.766                      .081
G 01 D21                      P G1 NL-TP#20                 0901 83F29
G 02                              6.442                      .075
G 01 D22                      P G1 NL-TP#21                 0901 83F29
G 02                              6.309                      .066
G 01 D23                      P G1 NL-TP#22                 0901 83F29
G 02                              7.184                      .055
G 01 D24                      P G1 NL-TP#23                 0901 83F29
G 02                              7.131                      .040
G 01 TP34                     P G1 NL-TP#34 SW 87AVE FB682  0901 83F29
G 02                              6.783                      .000
G 01 MW1                      P G1 MW-BBCWMW1A              0901 83F29
G 99 NORTH RIM OF OUTER CASING
G 02                              5.608
G 01 MW2                      P G1 MW-BBCWMW1A              0901 83F29
G 99 NORTH SIBE OF 2" PVC WELL
G 02                              5.428
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1834E.OBS
H 00 1834E                    08:19:07 08/26/82  08:19:07 08/26/82 ENGLISH   2.55
H 99 biscayne bay wells
C 00 08:20:55 08/26/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S1                         P F8
S 99 task 2
S 01 08:22:58 08/26/82  1.000
O 00 BM1                        P F8 CMON-R725
O 09 08:26:49                                                  5.743  4.531  3.319
O 00 TP1                        P F8
O 09 08:34:17                                                  6.382  5.162  3.942
S 00 S2                         P F8
S 01 08:34:22 08/26/82  1.000
O 00 TP1                        P F8
O 09 08:37:23                                                  6.941  5.694  4.447
O 00 TP2                        P F8
O 09 08:39:57                                                  6.100  4.837  3.574
S 00 S3                         P F8
S 01 08:40:03 08/26/82  1.000
O 00 TP2                        P F8
O 09 08:42:57                                                  6.368  5.107  3.846
O 00 TP3                        P F8
O 09 08:45:48                                                  6.332  5.072  3.812
S 00 S4                         P F8
S 01 08:45:54 08/26/82  1.000
O 00 TP3                        P F8
O 09 08:48:43                                                  6.129  4.867  3.605
O 00 TP4                        P F8
O 09 08:51:34                                                  6.556  5.295  4.034
S 00 S5                         P F8
S 01 08:51:38 08/26/82  1.000
O 00 TP4                        P F8
O 09 08:54:30                                                  6.112  4.860  3.608
O 00 TP5                        P F8
O 09 08:57:15                                                  5.352  4.099  2.846
S 00 S6                         P F8
S 01 08:57:20 08/26/82  1.000
O 00 TP5                        P F8
O 09 09:00:11                                                  5.434  4.192  2.950
O 00 TP6                        P F8
O 09 09:03:29                                                  5.986  4.746  3.506
S 00 S7                         P F8
S 01 09:03:33 08/26/82  1.000
O 00 TP6                        P F8
O 09 09:07:26                                                  5.767  4.515  3.263
O 00 TP7                        P F8
O 09 09:10:13                                                  6.636  5.370  4.104
S 00 S8                         P F8
S 01 09:10:19 08/26/82  1.000
O 00 TP7                        P F8
O 09 09:13:23                                                  6.456  5.175  3.894
O 00 TP8                        P F8
O 09 09:16:12                                                  6.285  4.991  3.697
S 00 S9                         P F8
S 01 09:16:16 08/26/82  1.000
O 00 TP8                        P F8
O 09 09:19:04                                                  7.067  5.787  4.507
O 00 TP9                        P F8
O 09 09:22:09                                                  6.953  5.668  4.383
S 00 S10                        P F8
S 01 09:22:13 08/26/82  1.000
O 00 TP9                        P F8
O 09 09:26:02                                                  6.500  5.252  4.004
O 00 TP10                       P F8
O 09 09:29:29                                                  6.753  5.497  4.241
S 00 S11                        P F8
S 01 09:29:33 08/26/82  1.000
O 00 TP10                       P F8
O 09 09:32:11                                                  6.352  5.063  3.774
```

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O 00 TP11                       P F8
O 09 09:36:15                                          6.579  5.303  4.027
S 00 S12                        P F8
S 01 09:36:20 08/26/82  1.000
O 00 TP11                       P F8
O 09 09:39:31                                          7.106  5.888  4.670
O 00 TP12                       P F8
O 09 09:41:58                                          6.466  5.213  3.960
S 00 S13                        P F8
S 01 09:42:03 08/26/82  1.000
O 00 TP12                       P F8
O 09 09:45:01                                          5.958  4.711  3.464
O 00 TP13                       P F8
O 09 09:47:58                                          6.451  5.193  3.935
S 00 S14                        P F8
S 01 09:48:03 08/26/82  1.000
O 00 TP13                       P F8
O 09 09:50:42                                          6.796  5.559  4.322
O 00 TP14                       P F8
O 09 09:55:11                                          6.041  4.792  3.543
S 00 S15                        P F8
S 01 09:55:16 08/26/82  1.000
O 00 TP14                       P F8
O 09 09:57:56                                          6.136  4.876  3.616
O 00 TP15                       P F8
O 09 10:00:48                                          5.698  4.438  3.178
S 00 S16                        P F8
S 01 10:00:54 08/26/82  1.000
O 00 TP15                       P F8
O 09 10:03:40                                          6.580  5.294  4.008
O 00 TP16                       P F8
O 09 10:06:39                                          6.849  5.584  4.319
S 00 S17                        P F8
S 01 10:06:44 08/26/82  1.000
O 00 TP16                       P F8
O 09 10:29:12                                          5.070  3.981  2.892
O 00 TP17                       P F8
O 09 10:33:11                                          7.777  6.672  5.567
S 00 S18                        P F8
S 01 10:33:15 08/26/82  1.000
O 00 TP17                       P F8
O 09 10:36:11                                          5.820  4.589  3.358
O 00 TP18                       P F8
O 09 10:39:05                                          6.725  5.483  4.241
S 00 S19                        P F8
S 01 10:39:10 08/26/82  1.000
O 00 TP18                       P F8
O 09 10:41:59                                          7.196  5.947  4.698
O 00 TP19                       P F8
O 09 10:44:46                                          6.207  4.950  3.693
S 00 S20                        P F8
S 01 10:44:50 08/26/82  1.000
O 00 TP19                       P F8
O 09 10:47:38                                          6.249  5.006  3.763
O 00 TP20                       P F8
O 09 10:50:23                                          5.858  4.620  3.382
S 00 S21                        P F8
S 01 10:50:31 08/26/82  1.000
O 00 TP20                       P F8
O 09 10:54:23                                          6.104  4.840  3.576
O 00 TP21                       P F8
O 09 10:57:47                                          6.583  5.320  4.057
S 00 S22                        P F8
S 01 10:57:51 08/26/82  1.000
O 00 TP21                       P F8
O 09 11:01:29                                          6.771  5.504  4.237
O 00 TP22                       P F8
O 09 11:04:36                                          6.634  5.369  4.104
S 00 S23                        P F8
S 01 11:04:42 08/26/82  1.000
```

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O 00 TP22                       P F8
O 09 11:07:50                                          6.539  5.314  4.089
O 00 TP23                       P F8
O 09 11:10:43                                          6.741  5.501  4.261
S 00 S24                        P F8
S 01 11:10:48 08/26/82  1.000
O 00 TP23                       P F8
O 09 11:14:03                                          6.142  4.874  3.606
O 00 TP24                       P F8
O 09 11:17:14                                          5.974  4.713  3.452
S 00 S25                        P F8
S 01 11:17:23 08/26/82  1.000
O 00 TP24                       P F8
O 09 11:20:05                                          6.591  5.288  3.985
O 00 TP25                       P F8
O 09 11:23:08                                          6.516  5.202  3.888
S 00 S26                        P F8
S 01 11:23:12 08/26/82  1.000
O 00 TP25                       P F8
O 09 11:27:12                                          5.043  4.818  4.593
O 00 BM2                        P F8 CMON-h098
O 09 11:28:16                                          6.763  6.532  6.301
S 00 S27                        P F8
S 01 12:36:48 08/26/82  1.000
O 00 BM2                        P F8 CMON-h098
O 09 12:41:24                                          7.971  6.707  5.443
O 00 TP26                       P F8
O 09 12:44:07                                          6.205  4.948  3.691
S 00 S28                        P F8
S 01 12:44:34 08/26/82  1.000
O 00 TP26                       P F8
O 09 12:47:32                                          6.702  5.440  4.178
O 00 TP27                       P F8
O 09 12:50:32                                          6.513  5.242  3.971
S 00 S29                        P F8
S 01 12:50:38 08/26/82  1.000
O 00 TP27                       P F8
O 09 12:54:46                                          4.694  4.114  3.534
O 00 TP28                       P F8
O 09 12:57:30                                          5.714  5.031  4.348
S 00 S30                        P F8
S 01 12:57:35 08/26/82  1.000
O 00 TP28                       P F8
O 09 12:59:58                                          6.581  5.304  4.027
O 00 TP29                       P F8
O 09 13:02:46                                          6.433  5.139  3.845
S 00 S31                        P F8
S 01 13:02:51 08/26/82  1.000
O 00 TP29                       P F8
O 09 13:05:50                                          6.391  5.114  3.837
O 00 TP30                       P F8
O 09 13:08:58                                          6.766  5.480  4.194
S 00 S32                        P F8
S 01 13:09:03 08/26/82  1.000
O 00 TP30                       P F8
O 09 13:11:51                                          6.516  5.256  3.996
O 00 TP31                       P F8
O 09 13:14:53                                          6.417  5.155  3.893
S 00 S33                        P F8
S 01 13:14:57 08/26/82  1.000
O 00 TP31                       P F8
O 09 13:17:46                                          6.452  5.178  3.904
O 00 TP32                       P F8
O 09 13:20:56                                          6.165  4.908  3.651
S 00 S34                        P F8
S 01 13:21:02 08/26/82  1.000
O 00 TP32                       P F8
O 09 13:23:53                                          6.491  5.538  4.585
O 00 TP33                       P F8
O 09 13:25:42                                          5.949  5.068  4.187
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O 00 MW1                        P F8 MW-bbcwmw3a
O 09 13:28:56                                      3.246  2.343  1.440
O 00 MW2                        P F8 MW-bbcwmw3b
O 09 13:29:56                                      3.228  2.303  1.378
O 00 GND1                       P F8 GND
O 09 13:30:26                                      6.191  5.270  4.349
S 00 S35                        P F8
S 01 13:30:50 08/26/82  1.000
O 00 TP33                       P F8
O 09 13:31:29                                      5.987  5.106  4.225
O 00 TP32                       P F8
O 09 13:34:50                                      6.530  5.576  4.622
S 00 S36                        P F8
S 01 13:35:04 08/26/82  1.000
O 00 TP32                       P F8
O 09 13:37:31                                      6.235  4.921  3.607
O 00 TP31                       P F8
O 09 13:38:28                                      6.414  5.197  3.980
S 00 S37                        P F8
S 01 13:38:35 08/26/82  1.000
O 00 TP31                       P F8
O 09 13:41:02                                      6.321  5.035  3.749
O 00 TP30                       P F8
O 09 13:41:50                                      6.375  5.141  3.907
S 00 S38                        P F8
S 01 13:41:56 08/26/82  1.000
O 00 TP30                       P F8
O 09 13:44:26                                      6.218  4.926  3.634
O 00 TP29                       P F8
O 09 13:45:20                                      5.830  4.560  3.290
S 00 S39                        P F8
S 01 13:45:24 08/26/82  1.000
O 00 TP29                       P F8
O 09 13:48:06                                      6.432  5.146  3.860
O 00 TP28                       P F8
O 09 13:49:12                                      6.594  5.309  4.024
S 00 S40                        P F8
S 01 13:49:19 08/26/82  1.000
O 00 TP28                       P F8
O 09 13:52:08                                      6.955  5.682  4.409
O 00 TP34                       P F8
O 09 14:11:46                                      6.128  4.865  3.602
S 00 S41                        P F8
S 01 14:11:52 08/26/82  1.000
O 00 TP34                       P F8
O 09 14:14:37                                      6.297  5.027  3.757
O 00 TP35                       P F8
O 09 14:17:19                                      6.374  5.111  3.848
S 00 S42                        P F8
S 01 14:17:24 08/26/82  1.000
O 00 TP35                       P F8
O 09 14:20:27                                      6.256  5.009  3.762
O 00 TP36                       P F8
O 09 14:23:32                                      6.480  5.224  3.968
S 00 S43                        P F8
S 01 14:23:37 08/26/82  1.000
O 00 TP36                       P F8
O 09 14:26:39                                      6.149  4.928  3.707
O 00 TP37                       P F8
O 09 14:30:10                                      6.667  5.404  4.141
S 00 S44                        P F8
S 01 14:30:18 08/26/82  1.000
O 00 TP37                       P F8
O 09 14:34:15                                      6.493  5.234  3.975
O 00 TP38                       P F8
O 09 14:36:49                                      5.940  4.686  3.432
S 00 S45                        P F8
S 01 14:36:53 08/26/82  1.000
O 00 TP38                       P F8
O 09 14:41:07                                      5.810  4.793  3.776
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O 00 TP39                       P F8
O 09 14:43:11                                          4.679  3.765  2.851
S 00 S46                        P F8
S 01 14:43:15 08/26/82  1.000
O 00 TP39                       P F8
O 09 14:46:23                                          6.614  5.385  4.156
O 00 TP40                       P F8
O 09 14:49:14                                          6.276  5.027  3.778
S 00 S47                        P F8
S 01 14:49:25 08/26/82  1.000
O 00 TP40                       P F8
O 09 14:52:17                                          6.339  5.098  3.857
O 00 TP41                       P F8
O 09 14:54:51                                          6.191  4.956  3.721
S 00 S48                        P F8
S 01 14:54:56 08/26/82  1.000
O 00 TP41                       P F8
O 09 15:00:20                                          9.352  7.850  6.348
O 00 TP42                       P F8
O 09 15:05:14                                          5.467  3.977  2.487
S 00 S49                        P F8
S 01 15:27:40 08/26/82  1.000
O 00 TP42                       P F8
O 09 15:30:02                                          6.368  5.146  3.924
O 00 TP43                       P F8
O 09 15:32:47                                          5.752  4.523  3.294
S 00 S50                        P F8
S 01 15:32:53 08/26/82  1.000
O 00 TP43                       P F8
O 09 15:36:54                                          6.468  5.172  3.876
O 00 TP44                       P F8
O 09 15:40:02                                          7.447  6.142  4.837
S 00 S51                        P F8
S 01 15:40:07 08/26/82  1.000
O 00 TP44                       P F8
O 09 15:42:44                                          6.445  5.157  3.869
O 00 TP45                       P F8
O 09 15:45:39                                          6.926  5.646  4.366
S 00 S52                        P F8
S 01 15:45:45 08/26/82  1.000
O 00 TP45                       P F8
O 09 15:48:33                                          5.770  4.482  3.194
O 00 TP46                       P F8
O 09 15:51:20                                          6.753  5.476  4.199
S 00 S53                        P F8
S 01 15:51:27 08/26/82  1.000
O 00 TP46                       P F8
O 09 15:54:05                                          6.305  5.011  3.717
O 00 TP47                       P F8
O 09 15:57:09                                          5.405  4.112  2.819
S 00 S54                        P F8
S 01 15:57:14 08/26/82  1.000
O 00 TP47                       P F8
O 09 15:59:53                                          6.698  5.425  4.152
O 00 TP48                       P F8
O 09 16:02:54                                          7.543  6.281  5.019
S 00 S55                        P F8
S 01 16:02:58 08/26/82  1.000
O 00 TP48                       P F8
O 09 16:05:38                                          6.132  4.834  3.536
O 00 TP49                       P F8
O 09 16:09:27                                          6.010  4.696  3.382
S 00 S56                        P F8
S 01 16:09:31 08/26/82  1.000
O 00 TP49                       P F8
O 09 16:12:25                                          6.416  5.139  3.862
O 00 TP50                       P F8
O 09 16:15:18                                          5.722  4.438  3.154
S 00 S57                        P F8
S 01 16:15:23 08/26/82  1.000
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O 00 TP50                       P F8
O 09 16:18:14                                                  6.193  4.922  3.651
O 00 TP51                       P F8
O 09 16:21:08                                                  6.559  5.299  4.039
S 00 S58                        P F8
S 01 16:21:12 08/26/82  1.000
O 00 TP51                       P F8
O 09 16:23:59                                                  5.046  3.766  2.486
O 00 TP52                       P F8
O 09 16:26:58                                                  7.430  6.190  4.950
S 00 S59                        P F8
S 01 16:27:07 08/26/82  1.000
O 00 TP52                       P F8
O 09 16:29:45                                                  4.976  4.431  3.886
O 00 BM3                        P F8 PIP-r724
O 09 16:30:51                                                  3.967  3.525  3.083
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S59,BM3,TP52,MW2,GND1
‘↕F2–    9¶“ñ┬‘↕^”– €¤  ¤  x*"├–┼          “Ò“¼└‘↕^”–♬—   ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834E.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 TP32     - TP33            .000
 TP31     - TP32            .006
 TP30     - TP31            .005
 TP29     - TP30            .000
 TP28     - TP29            .002
 END OF MISCLOSURE REPORT

    69 OF   119 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    50
 NUMBER OF MEASUREMENTS =    49
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       99

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

   BM1               5.260             5.260         .000        .000  ( .0)
   BM3               5.330             5.330         .000        .000  ( .0)
```

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BM3 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL		EST. ERROR
BM1	TP1	-.631	-.001	(.1)	.010
TP1	TP2	.857	-.001	(.1)	.010
TP2	TP3	.035	-.001	(.1)	.010
TP3	TP4	-.428	-.001	(.1)	.010
TP4	TP5	.761	-.001	(.1)	.010
TP5	TP6	-.554	-.001	(.1)	.010
TP6	TP7	-.855	-.001	(.1)	.010
TP7	TP8	.184	-.001	(.1)	.010
TP8	TP9	.119	-.001	(.1)	.010
TP9	TP10	-.245	-.001	(.1)	.010
TP10	TP11	-.240	-.001	(.1)	.010
TP11	TP12	.675	-.001	(.1)	.010
TP12	TP13	-.482	-.001	(.1)	.010
TP13	TP14	.767	-.001	(.1)	.010
TP14	TP15	.438	-.001	(.1)	.010
TP15	TP16	-.290	-.001	(.1)	.010
TP16	TP17	-2.691	-.001	(.1)	.010
TP17	TP18	-.894	-.001	(.1)	.010
TP18	TP19	.997	-.001	(.1)	.010
TP19	TP20	.386	-.001	(.1)	.010
TP20	TP21	-.480	-.001	(.1)	.010
TP21	TP22	.135	-.001	(.1)	.010
TP22	TP23	-.187	-.001	(.1)	.010
TP23	TP24	.161	-.001	(.1)	.010
TP24	TP25	.086	-.001	(.1)	.010
TP25	BM2	-1.714	-.001	(.1)	.010
BM2	TP26	1.759	-.001	(.1)	.010
TP26	TP27	.198	-.001	(.1)	.010
TP27	TP28	-.917	-.001	(.1)	.010
TP28	TP34	.817	-.001	(.1)	.010
TP34	TP35	-.084	-.001	(.1)	.010
TP35	TP36	-.215	-.001	(.1)	.010
TP36	TP37	-.476	-.001	(.1)	.010
TP37	TP38	.548	-.001	(.1)	.010
TP38	TP39	1.028	-.001	(.1)	.010
TP39	TP40	.358	-.001	(.1)	.010
TP40	TP41	.142	-.001	(.1)	.010
TP41	TP42	3.873	-.001	(.1)	.010
TP42	TP43	.623	-.001	(.1)	.010
TP43	TP44	-.970	-.001	(.1)	.010
TP44	TP45	-.489	-.001	(.1)	.010
TP45	TP46	-.994	-.001	(.1)	.010
TP46	TP47	.899	-.001	(.1)	.010
TP47	TP48	-.856	-.001	(.1)	.010
TP48	TP49	.138	-.001	(.1)	.010
TP49	TP50	.701	-.001	(.1)	.010
TP50	TP51	-.377	-.001	(.1)	.010
TP51	TP52	-2.424	-.001	(.1)	.010
TP52	BM3	.906	-.001	(.1)	.010

ELEV. DIFF. RMS ERROR = .001 SNOOP RMS = .1
MAX. ELEV. DIFF. RESIDUAL TP40 - TP41 OF .001

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	5.260	.001
TP1	4.628	.079
TP2	5.485	.111

TP3	5.519	.134
TP4	5.091	.153
TP5	5.851	.170
TP6	5.297	.184
TP7	4.441	.196
TP8	4.624	.207
TP9	4.743	.217
TP10	4.497	.226
TP11	4.257	.234
TP12	4.931	.241
TP13	4.449	.247
TP14	5.215	.253
TP15	5.652	.258
TP16	5.362	.263
TP17	2.670	.267
TP18	1.776	.270
TP19	2.772	.273
TP20	3.158	.275
TP21	2.677	.277
TP22	2.811	.279
TP23	2.624	.279
TP24	2.784	.280
TP25	2.870	.280
BM2	1.155	.279
TP26	2.914	.279
TP27	3.111	.277
TP28	2.193	.275
TP34	3.010	.273
TP35	2.925	.270
TP36	2.710	.267
TP37	2.233	.263
TP38	2.781	.258
TP39	3.808	.253
TP40	4.165	.247
TP41	4.307	.241
TP42	8.179	.234
TP43	8.802	.226
TP44	7.831	.217
TP45	7.342	.207
TP46	6.347	.196
TP47	7.245	.184
TP48	6.389	.170
TP49	6.526	.153
TP50	7.227	.134
TP51	6.849	.111
TP52	4.425	.079
BM3	5.330	.001

STANDARD ERROR OF UNIT WEIGHT IS .400
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .400 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834E.CHL

PROJECT NAME IS 1834E

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 23218.900
CLOSURE IN ELEVATION (Z) = -.028
CLOSURE PER STATION = -.001
PRECISION = 1 / 829246.

STATION	ELEVATION (Z)
BM1	5.260
TP1	4.628
TP2	5.485

TP3	5.519
TP4	5.091
TP5	5.851
TP6	5.297
TP7	4.441
TP8	4.624
TP9	4.743
TP10	4.497
TP11	4.257
TP12	4.931
TP13	4.449
TP14	5.215
TP15	5.652
TP16	5.362
TP17	2.670
TP18	1.776
TP19	2.772
TP20	3.158
TP21	2.677
TP22	2.811
TP23	2.624
TP24	2.784
TP25	2.870
BM2	1.155
TP26	2.914
TP27	3.111
TP28	2.193
TP34	3.010
TP35	2.925
TP36	2.710
TP37	2.233
TP38	2.781
TP39	3.808
TP40	4.165
TP41	4.307
TP42	8.179
TP43	8.802
TP44	7.831
TP45	7.342
TP46	6.347
TP47	7.245
TP48	6.389
TP49	6.526
TP50	7.227
TP51	6.849
TP52	4.425
BM3	5.330

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 4.398 MILES
OVERALL PRECISION = 1 / 829246.

```
1834E.CTL
G 00 1834E
G 01 BM1      BM1         P F8 IRC R-725                    0901 83F88
G 02                                5.2600                     .0001
GD01 BM2      BM2         P F8 IRC H-098                    0901 83F88
GD02                               13.1200???                  .0001
G 01 BM3      BM3         P F8 IRC R-724                    0901 83F88
G 02                                5.3300                     .0001
```

```
1834E.XYZ
G 00         1834E.XYZ
G 01 BM1                   P F8 CMON-r725                    0901 83F88
G 02                            5.260                         .001
G 01 TP1                   P F8                              0901 83F88
G 02                            4.628                         .079
G 01 TP2                   P F8                              0901 83F88
```

```
G 02                                    5.485                         .111
G 01 TP3                           P F8                          0901 83F88
G 02                                    5.519                         .134
G 01 TP4                           P F8                          0901 83F88
G 02                                    5.091                         .153
G 01 TP5                           P F8                          0901 83F88
G 02                                    5.851                         .170
G 01 TP6                           P F8                          0901 83F88
G 02                                    5.297                         .184
G 01 TP7                           P F8                          0901 83F88
G 02                                    4.441                         .196
G 01 TP8                           P F8                          0901 83F88
G 02                                    4.624                         .207
G 01 TP9                           P F8                          0901 83F88
G 02                                    4.743                         .217
G 01 TP10                          P F8                          0901 83F88
G 02                                    4.497                         .226
G 01 TP11                          P F8                          0901 83F88
G 02                                    4.257                         .234
G 01 TP12                          P F8                          0901 83F88
G 02                                    4.931                         .241
G 01 TP13                          P F8                          0901 83F88
G 02                                    4.449                         .247
G 01 TP14                          P F8                          0901 83F88
G 02                                    5.215                         .253
G 01 TP15                          P F8                          0901 83F88
G 02                                    5.652                         .258
G 01 TP16                          P F8                          0901 83F88
G 02                                    5.362                         .263
G 01 TP17                          P F8                          0901 83F88
G 02                                    2.670                         .267
G 01 TP18                          P F8                          0901 83F88
G 02                                    1.776                         .270
G 01 TP19                          P F8                          0901 83F88
G 02                                    2.772                         .273
G 01 TP20                          P F8                          0901 83F88
G 02                                    3.158                         .275
G 01 TP21                          P F8                          0901 83F88
G 02                                    2.677                         .277
G 01 TP22                          P F8                          0901 83F88
G 02                                    2.811                         .279
G 01 TP23                          P F8                          0901 83F88
G 02                                    2.624                         .279
G 01 TP24                          P F8                          0901 83F88
G 02                                    2.784                         .280
G 01 TP25                          P F8                          0901 83F88
G 02                                    2.870                         .280
G 01 BM2                           P F8 CMON-h098                0901 83F88
G 02                                    1.155                         .279
G 01 TP26                          P F8                          0901 83F88
G 02                                    2.914                         .279
G 01 TP27                          P F8                          0901 83F88
G 02                                    3.111                         .277
G 01 TP28                          P F8                          0901 83F88
G 02                                    2.193                         .275
G 01 TP29                          P F8                          0901 83F88
G 02                                    2.357
G 01 TP30                          P F8                          0901 83F88
G 02                                    1.991
G 01 TP31                          P F8                          0901 83F88
G 02                                    2.095
G 01 TP32                          P F8                          0901 83F88
G 02                                    2.368
G 01 TP33                          P F8                          0901 83F88
G 02                                    2.838
G 01 MW1                           P F8 MW-bbcwmw3a GW2          0901 83F88
G 02                                    5.563
G 01 MW2                           P F8 MW-bbcwmw3b GW2          0901 83F88
G 02                                    5.603
G 01 GND1                          P F8 GND                      0901 83F88
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G 02                                2.636
G 01 TP34                      P F8                         0901 83F88
G 02                                3.010                        .273
G 01 TP35                      P F8                         0901 83F88
G 02                                2.925                        .270
G 01 TP36                      P F8                         0901 83F88
G 02                                2.710                        .267
G 01 TP37                      P F8                         0901 83F88
G 02                                2.233                        .263
G 01 TP38                      P F8                         0901 83F88
G 02                                2.781                        .258
G 01 TP39                      P F8                         0901 83F88
G 02                                3.808                        .253
G 01 TP40                      P F8                         0901 83F88
G 02                                4.165                        .247
G 01 TP41                      P F8                         0901 83F88
G 02                                4.307                        .241
G 01 TP42                      P F8                         0901 83F88
G 02                                8.179                        .234
G 01 TP43                      P F8                         0901 83F88
G 02                                8.802                        .226
G 01 TP44                      P F8                         0901 83F88
G 02                                7.831                        .217
G 01 TP45                      P F8                         0901 83F88
G 02                                7.342                        .207
G 01 TP46                      P F8                         0901 83F88
G 02                                6.347                        .196
G 01 TP47                      P F8                         0901 83F88
G 02                                7.245                        .184
G 01 TP48                      P F8                         0901 83F88
G 02                                6.389                        .170
G 01 TP49                      P F8                         0901 83F88
G 02                                6.526                        .153
G 01 TP50                      P F8                         0901 83F88
G 02                                7.227                        .134
G 01 TP51                      P F8                         0901 83F88
G 02                                6.849                        .111
G 01 TP52                      P F8                         0901 83F88
G 02                                4.425                        .079
G 01 BM3                       P F8 PIP-r724                0901 83F88
G 02                                5.330                        .001
```

```
1834E.OBS
H 00 1834E                    08:19:07 08/26/82  08:19:07 08/26/82 ENGLISH   2.55
H 99 biscayne bay wells
C 00 08:20:55 08/26/82  90 30.0 000001 SH  CC  JS
C 01 WILD       NA2000     91119            100
S 00 S1                         P F8
S 99 task 2
S 01 08:22:58 08/26/82  1.000
O 00 BM1                        P F8 CMON-R725
O 09 08:26:49                                                5.743  4.531  3.319
O 00 TP1                        P F8
O 09 08:34:17                                                6.382  5.162  3.942
S 00 S2                         P F8
S 01 08:34:22 08/26/82  1.000
O 00 TP1                        P F8
O 09 08:37:23                                                6.941  5.694  4.447
O 00 TP2                        P F8
O 09 08:39:57                                                6.100  4.837  3.574
S 00 S3                         P F8
S 01 08:40:03 08/26/82  1.000
O 00 TP2                        P F8
O 09 08:42:57                                                6.368  5.107  3.846
O 00 TP3                        P F8
O 09 08:45:48                                                6.332  5.072  3.812
S 00 S4                         P F8
S 01 08:45:54 08/26/82  1.000
O 00 TP3                        P F8
O 09 08:48:43                                                6.129  4.867  3.605
O 00 TP4                        P F8
O 09 08:51:34                                                6.556  5.295  4.034
S 00 S5                         P F8
S 01 08:51:38 08/26/82  1.000
O 00 TP4                        P F8
O 09 08:54:30                                                6.112  4.860  3.608
O 00 TP5                        P F8
O 09 08:57:15                                                5.352  4.099  2.846
S 00 S6                         P F8
S 01 08:57:20 08/26/82  1.000
O 00 TP5                        P F8
O 09 09:00:11                                                5.434  4.192  2.950
O 00 TP6                        P F8
O 09 09:03:29                                                5.986  4.746  3.506
S 00 S7                         P F8
S 01 09:03:33 08/26/82  1.000
O 00 TP6                        P F8
O 09 09:07:26                                                5.767  4.515  3.263
O 00 TP7                        P F8
O 09 09:10:13                                                6.636  5.370  4.104
S 00 S8                         P F8
S 01 09:10:19 08/26/82  1.000
O 00 TP7                        P F8
O 09 09:13:23                                                6.456  5.175  3.894
O 00 TP8                        P F8
O 09 09:16:12                                                6.285  4.991  3.697
S 00 S9                         P F8
S 01 09:16:16 08/26/82  1.000
O 00 TP8                        P F8
O 09 09:19:04                                                7.067  5.787  4.507
O 00 TP9                        P F8
O 09 09:22:09                                                6.953  5.668  4.383
S 00 S10                        P F8
S 01 09:22:13 08/26/82  1.000
O 00 TP9                        P F8
O 09 09:26:02                                                6.500  5.252  4.004
O 00 TP10                       P F8
O 09 09:29:29                                                6.753  5.497  4.241
S 00 S11                        P F8
S 01 09:29:33 08/26/82  1.000
O 00 TP10                       P F8
O 09 09:32:11                                                6.352  5.063  3.774
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O 00 TP11                       P F8
O 09 09:36:15                                          6.579  5.303  4.027
S 00 S12                        P F8
S 01 09:36:20 08/26/82  1.000
O 00 TP11                       P F8
O 09 09:39:31                                          7.106  5.888  4.670
O 00 TP12                       P F8
O 09 09:41:58                                          6.466  5.213  3.960
S 00 S13                        P F8
S 01 09:42:03 08/26/82  1.000
O 00 TP12                       P F8
O 09 09:45:01                                          5.958  4.711  3.464
O 00 TP13                       P F8
O 09 09:47:58                                          6.451  5.193  3.935
S 00 S14                        P F8
S 01 09:48:03 08/26/82  1.000
O 00 TP13                       P F8
O 09 09:50:42                                          6.796  5.559  4.322
O 00 TP14                       P F8
O 09 09:55:11                                          6.041  4.792  3.543
S 00 S15                        P F8
S 01 09:55:16 08/26/82  1.000
O 00 TP14                       P F8
O 09 09:57:56                                          6.136  4.876  3.616
O 00 TP15                       P F8
O 09 10:00:48                                          5.698  4.438  3.178
S 00 S16                        P F8
S 01 10:00:54 08/26/82  1.000
O 00 TP15                       P F8
O 09 10:03:40                                          6.580  5.294  4.008
O 00 TP16                       P F8
O 09 10:06:39                                          6.849  5.584  4.319
S 00 S17                        P F8
S 01 10:06:44 08/26/82  1.000
O 00 TP16                       P F8
O 09 10:29:12                                          5.070  3.981  2.892
O 00 TP17                       P F8
O 09 10:33:11                                          7.777  6.672  5.567
S 00 S18                        P F8
S 01 10:33:15 08/26/82  1.000
O 00 TP17                       P F8
O 09 10:36:11                                          5.820  4.589  3.358
O 00 TP18                       P F8
O 09 10:39:05                                          6.725  5.483  4.241
S 00 S19                        P F8
S 01 10:39:10 08/26/82  1.000
O 00 TP18                       P F8
O 09 10:41:59                                          7.196  5.947  4.698
O 00 TP19                       P F8
O 09 10:44:46                                          6.207  4.950  3.693
S 00 S20                        P F8
S 01 10:44:50 08/26/82  1.000
O 00 TP19                       P F8
O 09 10:47:38                                          6.249  5.006  3.763
O 00 TP20                       P F8
O 09 10:50:23                                          5.858  4.620  3.382
S 00 S21                        P F8
S 01 10:50:31 08/26/82  1.000
O 00 TP20                       P F8
O 09 10:54:23                                          6.104  4.840  3.576
O 00 TP21                       P F8
O 09 10:57:47                                          6.583  5.320  4.057
S 00 S22                        P F8
S 01 10:57:51 08/26/82  1.000
O 00 TP21                       P F8
O 09 11:01:29                                          6.771  5.504  4.237
O 00 TP22                       P F8
O 09 11:04:36                                          6.634  5.369  4.104
S 00 S23                        P F8
S 01 11:04:42 08/26/82  1.000
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O 00 TP22                       P F8
O 09 11:07:50                                          6.539  5.314  4.089
O 00 TP23                       P F8
O 09 11:10:43                                          6.741  5.501  4.261
S 00 S24                        P F8
S 01 11:10:48 08/26/82  1.000
O 00 TP23                       P F8
O 09 11:14:03                                          6.142  4.874  3.606
O 00 TP24                       P F8
O 09 11:17:14                                          5.974  4.713  3.452
S 00 S25                        P F8
S 01 11:17:23 08/26/82  1.000
O 00 TP24                       P F8
O 09 11:20:05                                          6.591  5.288  3.985
O 00 TP25                       P F8
O 09 11:23:08                                          6.516  5.202  3.888
S 00 S26                        P F8
S 01 11:23:12 08/26/82  1.000
O 00 TP25                       P F8
O 09 11:27:12                                          5.043  4.818  4.593
O 00 BM2                        P F8 CMON-h098
O 09 11:28:16                                          6.763  6.532  6.301
S 00 S27                        P F8
S 01 12:36:48 08/26/82  1.000
O 00 BM2                        P F8 CMON-h098
O 09 12:41:24                                          7.971  6.707  5.443
O 00 TP26                       P F8
O 09 12:44:07                                          6.205  4.948  3.691
S 00 S28                        P F8
S 01 12:44:34 08/26/82  1.000
O 00 TP26                       P F8
O 09 12:47:32                                          6.702  5.440  4.178
O 00 TP27                       P F8
O 09 12:50:32                                          6.513  5.242  3.971
S 00 S29                        P F8
S 01 12:50:38 08/26/82  1.000
O 00 TP27                       P F8
O 09 12:54:46                                          4.694  4.114  3.534
O 00 TP28                       P F8
O 09 12:57:30                                          5.714  5.031  4.348
S 00 S30                        P F8
S 01 12:57:35 08/26/82  1.000
O 00 TP28                       P F8
O 09 12:59:58                                          6.581  5.304  4.027
O 00 TP29                       P F8
O 09 13:02:46                                          6.433  5.139  3.845
S 00 S31                        P F8
S 01 13:02:51 08/26/82  1.000
O 00 TP29                       P F8
O 09 13:05:50                                          6.391  5.114  3.837
O 00 TP30                       P F8
O 09 13:08:58                                          6.766  5.480  4.194
S 00 S32                        P F8
S 01 13:09:03 08/26/82  1.000
O 00 TP30                       P F8
O 09 13:11:51                                          6.516  5.256  3.996
O 00 TP31                       P F8
O 09 13:14:53                                          6.417  5.155  3.893
S 00 S33                        P F8
S 01 13:14:57 08/26/82  1.000
O 00 TP31                       P F8
O 09 13:17:46                                          6.452  5.178  3.904
O 00 TP32                       P F8
O 09 13:20:56                                          6.165  4.908  3.651
S 00 S34                        P F8
S 01 13:21:02 08/26/82  1.000
O 00 TP32                       P F8
O 09 13:23:53                                          6.491  5.538  4.585
O 00 TP33                       P F8
O 09 13:25:42                                          5.949  5.068  4.187
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O 00 MW1                        P F8 MW-bbcwmw3a
O 09 13:28:56                                      3.246  2.343  1.440
O 00 MW2                        P F8 MW-bbcwmw3b
O 09 13:29:56                                      3.228  2.303  1.378
O 00 GND1                       P F8 GND
O 09 13:30:26                                      6.191  5.270  4.349
S 00 S35                        P F8
S 01 13:30:50 08/26/82  1.000
O 00 TP33                       P F8
O 09 13:31:29                                      5.987  5.106  4.225
O 00 TP32                       P F8
O 09 13:34:50                                      6.530  5.576  4.622
S 00 S36                        P F8
S 01 13:35:04 08/26/82  1.000
O 00 TP32                       P F8
O 09 13:37:31                                      6.235  4.921  3.607
O 00 TP31                       P F8
O 09 13:38:28                                      6.414  5.197  3.980
S 00 S37                        P F8
S 01 13:38:35 08/26/82  1.000
O 00 TP31                       P F8
O 09 13:41:02                                      6.321  5.035  3.749
O 00 TP30                       P F8
O 09 13:41:50                                      6.375  5.141  3.907
S 00 S38                        P F8
S 01 13:41:56 08/26/82  1.000
O 00 TP30                       P F8
O 09 13:44:26                                      6.218  4.926  3.634
O 00 TP29                       P F8
O 09 13:45:20                                      5.830  4.560  3.290
S 00 S39                        P F8
S 01 13:45:24 08/26/82  1.000
O 00 TP29                       P F8
O 09 13:48:06                                      6.432  5.146  3.860
O 00 TP28                       P F8
O 09 13:49:12                                      6.594  5.309  4.024
S 00 S40                        P F8
S 01 13:49:19 08/26/82  1.000
O 00 TP28                       P F8
O 09 13:52:08                                      6.955  5.682  4.409
O 00 TP34                       P F8
O 09 14:11:46                                      6.128  4.865  3.602
S 00 S41                        P F8
S 01 14:11:52 08/26/82  1.000
O 00 TP34                       P F8
O 09 14:14:37                                      6.297  5.027  3.757
O 00 TP35                       P F8
O 09 14:17:19                                      6.374  5.111  3.848
S 00 S42                        P F8
S 01 14:17:24 08/26/82  1.000
O 00 TP35                       P F8
O 09 14:20:27                                      6.256  5.009  3.762
O 00 TP36                       P F8
O 09 14:23:32                                      6.480  5.224  3.968
S 00 S43                        P F8
S 01 14:23:37 08/26/82  1.000
O 00 TP36                       P F8
O 09 14:26:39                                      6.149  4.928  3.707
O 00 TP37                       P F8
O 09 14:30:10                                      6.667  5.404  4.141
S 00 S44                        P F8
S 01 14:30:18 08/26/82  1.000
O 00 TP37                       P F8
O 09 14:34:15                                      6.493  5.234  3.975
O 00 TP38                       P F8
O 09 14:36:49                                      5.940  4.686  3.432
S 00 S45                        P F8
S 01 14:36:53 08/26/82  1.000
O 00 TP38                       P F8
O 09 14:41:07                                      5.810  4.793  3.776
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O 00 TP39                       P F8
O 09 14:43:11                                          4.679  3.765  2.851
S 00 S46                        P F8
S 01 14:43:15 08/26/82  1.000
O 00 TP39                       P F8
O 09 14:46:23                                          6.614  5.385  4.156
O 00 TP40                       P F8
O 09 14:49:14                                          6.276  5.027  3.778
S 00 S47                        P F8
S 01 14:49:25 08/26/82  1.000
O 00 TP40                       P F8
O 09 14:52:17                                          6.339  5.098  3.857
O 00 TP41                       P F8
O 09 14:54:51                                          6.191  4.956  3.721
S 00 S48                        P F8
S 01 14:54:56 08/26/82  1.000
O 00 TP41                       P F8
O 09 15:00:20                                          9.352  7.850  6.348
O 00 TP42                       P F8
O 09 15:05:14                                          5.467  3.977  2.487
S 00 S49                        P F8
S 01 15:27:40 08/26/82  1.000
O 00 TP42                       P F8
O 09 15:30:02                                          6.368  5.146  3.924
O 00 TP43                       P F8
O 09 15:32:47                                          5.752  4.523  3.294
S 00 S50                        P F8
S 01 15:32:53 08/26/82  1.000
O 00 TP43                       P F8
O 09 15:36:54                                          6.468  5.172  3.876
O 00 TP44                       P F8
O 09 15:40:02                                          7.447  6.142  4.837
S 00 S51                        P F8
S 01 15:40:07 08/26/82  1.000
O 00 TP44                       P F8
O 09 15:42:44                                          6.445  5.157  3.869
O 00 TP45                       P F8
O 09 15:45:39                                          6.926  5.646  4.366
S 00 S52                        P F8
S 01 15:45:45 08/26/82  1.000
O 00 TP45                       P F8
O 09 15:48:33                                          5.770  4.482  3.194
O 00 TP46                       P F8
O 09 15:51:20                                          6.753  5.476  4.199
S 00 S53                        P F8
S 01 15:51:27 08/26/82  1.000
O 00 TP46                       P F8
O 09 15:54:05                                          6.305  5.011  3.717
O 00 TP47                       P F8
O 09 15:57:09                                          5.405  4.112  2.819
S 00 S54                        P F8
S 01 15:57:14 08/26/82  1.000
O 00 TP47                       P F8
O 09 15:59:53                                          6.698  5.425  4.152
O 00 TP48                       P F8
O 09 16:02:54                                          7.543  6.281  5.019
S 00 S55                        P F8
S 01 16:02:58 08/26/82  1.000
O 00 TP48                       P F8
O 09 16:05:38                                          6.132  4.834  3.536
O 00 TP49                       P F8
O 09 16:09:27                                          6.010  4.696  3.382
S 00 S56                        P F8
S 01 16:09:31 08/26/82  1.000
O 00 TP49                       P F8
O 09 16:12:25                                          6.416  5.139  3.862
O 00 TP50                       P F8
O 09 16:15:18                                          5.722  4.438  3.154
S 00 S57                        P F8
S 01 16:15:23 08/26/82  1.000
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O 00 TP50                       P F8
O 09 16:18:14                                                  6.193  4.922  3.651
O 00 TP51                       P F8
O 09 16:21:08                                                  6.559  5.299  4.039
S 00 S58                        P F8
S 01 16:21:12 08/26/82  1.000
O 00 TP51                       P F8
O 09 16:23:59                                                  5.046  3.766  2.486
O 00 TP52                       P F8
O 09 16:26:58                                                  7.430  6.190  4.950
S 00 S59                        P F8
S 01 16:27:07 08/26/82  1.000
O 00 TP52                       P F8
O 09 16:29:45                                                  4.976  4.431  3.886
O 00 BM3                        P F8 PIP-r724
O 09 16:30:51                                                  3.967  3.525  3.083
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S59,BM3,TP52,MW2,GND1
‘↕F2–    9¶“ñ┬‘↕^”– €¤  ¤  x*"├–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834E.1D
 MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 TP32     - TP33            .000
 TP31     - TP32            .006
 TP30     - TP31            .005
 TP29     - TP30            .000
 TP28     - TP29            .002
 END OF MISCLOSURE REPORT

    67 OF   117 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    50
 NUMBER OF MEASUREMENTS =    49
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       99

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

   BM1               6.780             6.780         .000        .000  ( .0)
   BM3               6.850             6.850         .000        .000  ( .0)
```

BENCHMARK RMS ERROR = .000 SNOOP RMS = .0
MAX. BENCHMARK RESIDUAL AT STATION BM1 OF .000

RESIDUALS

FROM	TO	MEASURED	RESIDUAL		EST. ERROR
BM1	TP1	-.631	-.001	(.1)	.010
TP1	TP2	.857	-.001	(.1)	.010
TP2	TP3	.035	-.001	(.1)	.010
TP3	TP4	-.428	-.001	(.1)	.010
TP4	TP5	.761	-.001	(.1)	.010
TP5	TP6	-.554	-.001	(.1)	.010
TP6	TP7	-.855	-.001	(.1)	.010
TP7	TP8	.184	-.001	(.1)	.010
TP8	TP9	.119	-.001	(.1)	.010
TP9	TP10	-.245	-.001	(.1)	.010
TP10	TP11	-.240	-.001	(.1)	.010
TP11	TP12	.675	-.001	(.1)	.010
TP12	TP13	-.482	-.001	(.1)	.010
TP13	TP14	.767	-.001	(.1)	.010
TP14	TP15	.438	-.001	(.1)	.010
TP15	TP16	-.290	-.001	(.1)	.010
TP16	TP17	-2.691	-.001	(.1)	.010
TP17	TP18	-.894	-.001	(.1)	.010
TP18	TP19	.997	-.001	(.1)	.010
TP19	TP20	.386	-.001	(.1)	.010
TP20	TP21	-.480	-.001	(.1)	.010
TP21	TP22	.135	-.001	(.1)	.010
TP22	TP23	-.187	-.001	(.1)	.010
TP23	TP24	.161	-.001	(.1)	.010
TP24	TP25	.086	-.001	(.1)	.010
TP25	BM2	-1.714	-.001	(.1)	.010
BM2	TP26	1.759	-.001	(.1)	.010
TP26	TP27	.198	-.001	(.1)	.010
TP27	TP28	-.917	-.001	(.1)	.010
TP28	TP34	.817	-.001	(.1)	.010
TP34	TP35	-.084	-.001	(.1)	.010
TP35	TP36	-.215	-.001	(.1)	.010
TP36	TP37	-.476	-.001	(.1)	.010
TP37	TP38	.548	-.001	(.1)	.010
TP38	TP39	1.028	-.001	(.1)	.010
TP39	TP40	.358	-.001	(.1)	.010
TP40	TP41	.142	-.001	(.1)	.010
TP41	TP42	3.873	-.001	(.1)	.010
TP42	TP43	.623	-.001	(.1)	.010
TP43	TP44	-.970	-.001	(.1)	.010
TP44	TP45	-.489	-.001	(.1)	.010
TP45	TP46	-.994	-.001	(.1)	.010
TP46	TP47	.899	-.001	(.1)	.010
TP47	TP48	-.856	-.001	(.1)	.010
TP48	TP49	.138	-.001	(.1)	.010
TP49	TP50	.701	-.001	(.1)	.010
TP50	TP51	-.377	-.001	(.1)	.010
TP51	TP52	-2.424	-.001	(.1)	.010
TP52	BM3	.906	-.001	(.1)	.010

ELEV. DIFF. RMS ERROR = .001 SNOOP RMS = .1
MAX. ELEV. DIFF. RESIDUAL TP39 - TP40 OF .001

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	6.780	.001
TP1	6.148	.079
TP2	7.005	.111

TP3	7.039	.134
TP4	6.611	.153
TP5	7.371	.170
TP6	6.817	.184
TP7	5.961	.196
TP8	6.144	.207
TP9	6.263	.217
TP10	6.017	.226
TP11	5.777	.234
TP12	6.451	.241
TP13	5.969	.247
TP14	6.735	.253
TP15	7.172	.258
TP16	6.882	.263
TP17	4.190	.267
TP18	3.296	.270
TP19	4.292	.273
TP20	4.678	.275
TP21	4.197	.277
TP22	4.331	.279
TP23	4.144	.279
TP24	4.304	.280
TP25	4.390	.280
BM2	2.675	.279
TP26	4.434	.279
TP27	4.631	.277
TP28	3.713	.275
TP34	4.530	.273
TP35	4.445	.270
TP36	4.230	.267
TP37	3.753	.263
TP38	4.301	.258
TP39	5.328	.253
TP40	5.685	.247
TP41	5.827	.241
TP42	9.699	.234
TP43	10.322	.226
TP44	9.351	.217
TP45	8.862	.207
TP46	7.867	.196
TP47	8.765	.184
TP48	7.909	.170
TP49	8.046	.153
TP50	8.747	.134
TP51	8.369	.111
TP52	5.945	.079
BM3	6.850	.001

STANDARD ERROR OF UNIT WEIGHT IS .400
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < .400 < 1.960
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

1834E.CHL
PROJECT NAME IS 1834E

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 23218.900
CLOSURE IN ELEVATION (Z) = -.028
CLOSURE PER STATION = -.001
PRECISION = 1 / 829246.

STATION	ELEVATION (Z)
BM1	6.780
TP1	6.148
TP2	7.005
TP3	7.039

TP4	6.611
TP5	7.371
TP6	6.817
TP7	5.961
TP8	6.144
TP9	6.263
TP10	6.017
TP11	5.777
TP12	6.451
TP13	5.969
TP14	6.735
TP15	7.172
TP16	6.882
TP17	4.190
TP18	3.296
TP19	4.292
TP20	4.678
TP21	4.197
TP22	4.331
TP23	4.144
TP24	4.304
TP25	4.390
BM2	2.675
TP26	4.434
TP27	4.631
TP28	3.713
TP34	4.530
TP35	4.445
TP36	4.230
TP37	3.753
TP38	4.301
TP39	5.328
TP40	5.685
TP41	5.827
TP42	9.699
TP43	10.322
TP44	9.351
TP45	8.862
TP46	7.867
TP47	8.765
TP48	7.909
TP49	8.046
TP50	8.747
TP51	8.369
TP52	5.945
BM3	6.850

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 4.398 MILES
OVERALL PRECISION = 1 / 829246.

```
1834E.CTL
G 00 1834E
G 01 BM1      BM1         P F8 IRC R-725                    0901 83F29
G 02                           6.7800                          .0001
G 01 BM3      BM3         P F8 IRC R-724                    0901 83F29
G 02                           6.8500                          .0001
```

```
1834E.XYZ
G 00         1834E.XYZ
G 01 BM1                    P F8 CMON-R725                  0901 83F29
G 02                           6.780                           .001
G 01 TP1                    P F8                            0901 83F29
G 02                           6.148                           .079
G 01 TP2                    P F8                            0901 83F29
G 02                           7.005                           .111
G 01 TP3                    P F8                            0901 83F29
G 02                           7.039                           .134
```

```
G 01 TP4                        P F8                            0901 83F29
G 02                               6.611                           .153
G 01 TP5                        P F8                            0901 83F29
G 02                               7.371                           .170
G 01 TP6                        P F8                            0901 83F29
G 02                               6.817                           .184
G 01 TP7                        P F8                            0901 83F29
G 02                               5.961                           .196
G 01 TP8                        P F8                            0901 83F29
G 02                               6.144                           .207
G 01 TP9                        P F8                            0901 83F29
G 02                               6.263                           .217
G 01 TP10                       P F8                            0901 83F29
G 02                               6.017                           .226
G 01 TP11                       P F8                            0901 83F29
G 02                               5.777                           .234
G 01 TP12                       P F8                            0901 83F29
G 02                               6.451                           .241
G 01 TP13                       P F8                            0901 83F29
G 02                               5.969                           .247
G 01 TP14                       P F8                            0901 83F29
G 02                               6.735                           .253
G 01 TP15                       P F8                            0901 83F29
G 02                               7.172                           .258
G 01 TP16                       P F8                            0901 83F29
G 02                               6.882                           .263
G 01 TP17                       P F8                            0901 83F29
G 02                               4.190                           .267
G 01 TP18                       P F8                            0901 83F29
G 02                               3.296                           .270
G 01 TP19                       P F8                            0901 83F29
G 02                               4.292                           .273
G 01 TP20                       P F8                            0901 83F29
G 02                               4.678                           .275
G 01 TP21                       P F8                            0901 83F29
G 02                               4.197                           .277
G 01 TP22                       P F8                            0901 83F29
G 02                               4.331                           .279
G 01 TP23                       P F8                            0901 83F29
G 02                               4.144                           .279
G 01 TP24                       P F8                            0901 83F29
G 02                               4.304                           .280
G 01 TP25                       P F8                            0901 83F29
G 02                               4.390                           .280
G 01 BM2                        P F8 CMON-h098                  0901 83F29
G 02                               2.675                           .279
G 01 TP26                       P F8                            0901 83F29
G 02                               4.434                           .279
G 01 TP27                       P F8                            0901 83F29
G 02                               4.631                           .277
G 01 TP28                       P F8                            0901 83F29
G 02                               3.713                           .275
G 01 TP29                       P F8                            0901 83F29
G 02                               3.877
G 01 TP30                       P F8                            0901 83F29
G 02                               3.511
G 01 TP31                       P F8                            0901 83F29
G 02                               3.615
G 01 TP32                       P F8                            0901 83F29
G 02                               3.888
G 01 TP33                       P F8                            0901 83F29
G 02                               4.358
G 01 MW1                        P F8 MW-bbcwmw3a GW2            0901 83F29
G 02                               7.083
G 01 MW2                        P F8 MW-bbcwmw3b GW1            0901 83F29
G 02                               7.123
G 01 GND1                       P F8 GND                        0901 83F29
G 02                               4.156
G 01 TP34                       P F8                            0901 83F29
G 02                               4.530                           .273
```

```
G 01 TP35                    P F8                          0901 83F29
G 02                            4.445                         .270
G 01 TP36                    P F8                          0901 83F29
G 02                            4.230                         .267
G 01 TP37                    P F8                          0901 83F29
G 02                            3.753                         .263
G 01 TP38                    P F8                          0901 83F29
G 02                            4.301                         .258
G 01 TP39                    P F8                          0901 83F29
G 02                            5.328                         .253
G 01 TP40                    P F8                          0901 83F29
G 02                            5.685                         .247
G 01 TP41                    P F8                          0901 83F29
G 02                            5.827                         .241
G 01 TP42                    P F8                          0901 83F29
G 02                            9.699                         .234
G 01 TP43                    P F8                          0901 83F29
G 02                           10.322                         .226
G 01 TP44                    P F8                          0901 83F29
G 02                            9.351                         .217
G 01 TP45                    P F8                          0901 83F29
G 02                            8.862                         .207
G 01 TP46                    P F8                          0901 83F29
G 02                            7.867                         .196
G 01 TP47                    P F8                          0901 83F29
G 02                            8.765                         .184
G 01 TP48                    P F8                          0901 83F29
G 02                            7.909                         .170
G 01 TP49                    P F8                          0901 83F29
G 02                            8.046                         .153
G 01 TP50                    P F8                          0901 83F29
G 02                            8.747                         .134
G 01 TP51                    P F8                          0901 83F29
G 02                            8.369                         .111
G 01 TP52                    P F8                          0901 83F29
G 02                            5.945                         .079
G 01 BM3                     P F8 PIP-r724                 0901 83F29
G 02                            6.850                         .001
```

```
1834FM.OBS
H 00 1834M                    12:50:20 11/15/95  12:50:20 11/15/95 ENGLISH   2.55
H 99 ELEV RUN TASK#5 BISCAYNE BAY WELLS
C 00 12:52:47 11/15/95  90 30.0 000001 DF  CC  NL
C 01 WILD       NA2000                      100
C 00 12:52:56 11/15/95  90 30.0 000001 DF  CC  NL
C 01 WILD       NA2000     90273            100
S 00 S1                        P G8
S 01 12:54:03 11/15/95  1.000
O 00 BM1                       P F8 NL-TP10
O 09 13:09:23                                                5.656  4.248  2.840
O 00 TP1                       P F8 NL
O 09 13:13:30                                                9.268  7.842  6.416
S 00 S2                        P G8
S 01 13:13:35 11/15/95  1.000
O 00 TP1                       P F8 NL
O 09 13:16:09                                                3.830  2.686  1.542
O 00 TP2                       P F8 NL
O 09 13:18:23                                                6.799  5.419  4.039
S 00 S3                        P G8
S 01 13:18:28 11/15/95  1.000
O 00 TP2                       P F8 NL
O 09 13:23:22                                                5.537  4.782  4.027
O 00 TP3                       P F8 NL
O 09 13:25:02                                                5.285  4.699  4.113
S 00 S4                        P G8
S 01 13:25:10 11/15/95  1.000
O 00 TP3                       P F8 NL
O 09 13:28:47                                                6.228  4.988  3.748
O 00 TP4                       P F8 NL
O 09 13:30:40                                                5.595  4.673  3.751
S 00 S5                        P G8
S 01 13:30:46 11/15/95  1.000
O 00 TP4                       P F8 NL
O 09 13:34:15                                                5.281  3.859  2.437
O 00 TP5                       P F8 NL
O 09 13:37:37                                                5.902  4.824  3.746
S 00 S6                        P G8
S 01 13:37:41 11/15/95  1.000
O 00 TP5                       P F8 NL
O 09 13:40:03                                                5.852  4.728  3.604
O 00 TP6                       P F8 NL
O 09 13:42:23                                                6.305  4.965  3.625
S 00 S7                        P G8
S 01 13:42:27 11/15/95  1.000
O 00 TP6                       P F8 NL
O 09 13:45:59                                                5.079  4.611  4.143
O 00 MW1                       P F8 MW-2
O 99 S. WESTERLY WELL N. SIDE OF TOP OF OUTER CASING
O 09 14:03:44                                                4.761  4.232  3.703
O 00 MW2                       P F8 MW-2
O 99 S. WESTERLY WELL-N. SIDE OF TOP OF 2"PVC WELL
O 09 14:02:33                                                4.977  4.448  3.919
S 00 S8                        P G8
S 01 14:05:15 11/15/95  1.000
O 00 MW2                       P F8 MW-4
O 99 S. WESTERLY WELL-N. SIDE OF TOP OF 2"PVC WELL
O 09 14:06:21                                                4.944  4.412  3.880
O 00 MW3                       P F8 MW-4
O 99 N. EASTERLY WELL N.SIDE OF TOP OF OUTER CASING
O 09 14:09:09                                                4.764  4.199  3.634
O 00 MW4                       P F8 MW
O 99 N. EASTERLY WELL N. SIDE OF TOP OF 2" PVC WELL
O 09 14:11:17                                                4.905  4.342  3.779
S 00 S9                        P G8
S 01 14:14:26 11/15/95  1.000
O 00 MW4                       P F8 MW
O 99 N. EASTERLY WELL N. SIDE OF TOP OF 2" PVC WELL
O 09 14:15:15                                                4.873  4.308  3.743
O 00 TP7                       P F8 TP#6 BEG
```

```
O 09 14:25:36                                                  5.002  4.537  4.072
S 00 S10                        P G8
S 01 14:25:42 11/15/95  1.000
O 00 TP7                        P F8 TP#6 BEB
O 09 14:28:24                                                  6.195  4.767  3.339
O 00 FTP1                       P F8 NL-TP#8-4.416 TP#5 BEG
O 09 14:30:14                                                  5.567  4.531  3.495
S 00 S1                         P G1
S 01 08:40:47 11/16/95  1.000
O 00 FTP1                       P F8 NL-TP#8-4.416 TP#5 BEG
O 99 BURGER KING CONT. FROM SEG M.
O 09 08:48:27                                                  6.059  5.047  4.035
O 00 FTP2                       P F8 NL
O 09 08:50:42                                                  5.575  4.069  2.563
S 00 S2                         P G1
S 01 08:50:59 11/16/95  1.000
O 00 FTP2                       P F8 NL
O 09 08:55:38                                                  5.436  4.385  3.334
O 00 FTP3                       P F8 NL
O 09 08:57:52                                                  5.804  4.701  3.598
S 00 S3                         P G1
S 01 08:58:09 11/16/95  1.000
O 00 FTP3                       P F8 NL
O 09 09:02:48                                                  4.827  4.055  3.283
O 00 FTP4                       P F8 NL
O 09 09:04:19                                                  4.718  4.140  3.562
S 00 S4                         P G1
S 01 09:04:33 11/16/95  1.000
O 00 FTP4                       P F8 NL
O 09 09:10:20                                                  7.108  5.817  4.526
O 00 FTP5                       P F8 NL
O 09 09:12:40                                                  4.320  3.088  1.856
S 00 S5                         P G1
S 01 09:13:07 11/16/95  1.000
O 00 FTP5                       P F8 NL
O 09 09:19:38                                                  9.190  7.652  6.114
O 00 FTP6                       P F8 NL-TP#9
O 99 TP#9 SAM HALLS LEVEL RUN DOWN OLD CUTLER RD.
O 09 09:24:15                                                  5.856  4.542  3.228
OD09 04:57:35                                                  5.092  3.768  2.444
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S13,BM1,TP11,MW4
‘↕F2–    3¶"ñ┬‘↕^"– €¤  ¤  x*ª→–┼          "Ò"¼└‘↕^"–♬—  ¦☼–ï┤j☼—â"×└‘↕^"–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
  STATIONS           MISCLOSURE
END OF MISCLOSURE REPORT

   12 OF    28 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
BAND IS   1 STATIONS
LEVEL NETWORK ADJUSTMENT

NUMBER OF BENCHMARKS =     2
NUMBER OF STATIONS =    16
NUMBER OF MEASUREMENTS =    15
NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       31

RESULTS OF ADJUSTMENT

BENCHMARK ELEVATION RESIDUALS

  STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

  BM1               11.307             11.307         .000        .000  ( .0)
  FTP6              10.828             10.828         .000        .000  ( .0)

BENCHMARK RMS ERROR =       .000 SNOOP RMS =   .0
MAX. BENCHMARK RESIDUAL AT STATION         BM1      OF       .000


RESIDUALS

  FROM          TO             MEASURED      RESIDUAL      EST. ERROR

  BM1           TP1              -3.594          .000  ( .0)    .010
  TP1           TP2              -2.733          .000  ( .0)    .010
  TP2           TP3                .083          .000  ( .0)    .010
  TP3           TP4                .315          .000  ( .0)    .010
  TP4           TP5               -.965          .000  ( .0)    .010
  TP5           TP6               -.237          .000  ( .0)    .010
  TP6           MW2                .163          .000  ( .0)    .010
  MW2           MW4                .070          .000  ( .0)    .010
  MW4           TP7               -.229          .000  ( .0)    .010
  TP7           FTP1               .236          .000  ( .0)    .010
  FTP1          FTP2               .978          .000  ( .0)    .010
  FTP2          FTP3              -.316          .000  ( .0)    .010
  FTP3          FTP4              -.085          .000  ( .0)    .010
  FTP4          FTP5              2.729          .000  ( .0)    .010
  FTP5          FTP6              3.110          .000  ( .0)    .010

ELEV. DIFF.  RMS ERROR =       .000 SNOOP RMS =   .0
MAX. ELEV. DIFF. RESIDUAL         FTP5     -         FTP6     OF       .000


95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR    1 D.F. IS 20.00

   STATION        ADJUSTED ELEV.     STANDARD ERROR

   BM1                   11.307               .000
   TP1                    7.713               .020
   TP2                    4.979               .027
   TP3                    5.062               .032
   TP4                    5.377               .035
   TP5                    4.412               .038
   TP6                    4.174               .039
   MW2                    4.337               .040
   MW4                    4.407               .040
   TP7                    4.178               .039
   FTP1                   4.413               .038
   FTP2                   5.391               .035
   FTP3                   5.075               .032
   FTP4                   4.990               .027
   FTP5                   7.718               .020
   FTP6                  10.828               .000
```

```
     STANDARD ERROR OF UNIT WEIGHT IS       .103
      WITH    1 DEGREES OF FREEDOM

 CHI SQUARED TEST ON ANALYSIS
   .031 <   .103 <  1.960
   (LOW)             (HIGH)
 PASSES AT THE 5 % SIGNIFICANCE LEVEL
```

```
1834FM.CHL
          PROJECT NAME IS 1834M

 ELEVATION CLOSURE REPORT
 SUM OF DISTANCES ALONG SURVEY IS       6177.900
 CLOSURE IN ELEVATION (Z) =    -.004
 CLOSURE PER STATION =     .000
 PRECISION = 1 /     1544475.
     STATION          ELEVATION (Z)
         BM1                11.307
         TP1                 7.713
         TP2                 4.979
         TP3                 5.062
         TP4                 5.377
         TP5                 4.412
         TP6                 4.174
         MW2                 4.337
         MW4                 4.407
         TP7                 4.178
         FTP1                4.413
         FTP2                5.391
         FTP3                5.075
         FTP4                4.990
         FTP5                7.718
         FTP6               10.828
```

```
 TOTAL LENGTH OF EVALUATED SURVEY DISTANCE =      1.170 MILES
 OVERALL PRECISION = 1 /     1544475.
```

```
1834FM.CTL
G 00 1834M
G 01 BM1      TP10        P F8 IRC TP10 SEG B              0901 83F88
G 02                           11.3070                        .0001
G 01 FTP6     FTP6        P F8 IRC TP9  SEG C              0901 83F88
G 02                           10.8280                        .0001
GD01 FTP6     FTP6        P F8 IRC TP5  SEG B              0901 83F88
GD02                            4.7430                        .0001
```

```
1834FM.XYZ
G 00         1834FM.XYZ
G 01 BM1                    P F8 NL-TP10                    0901 83F88
G 02                           11.307                         .000
G 01 TP1                    P F8 NL                         0901 83F88
G 02                            7.713                         .020
G 01 TP2                    P F8 NL                         0901 83F88
G 02                            4.979                         .027
G 01 TP3                    P F8 NL                         0901 83F88
G 02                            5.062                         .032
G 01 TP4                    P F8 NL                         0901 83F88
G 02                            5.377                         .035
G 01 TP5                    P F8 NL                         0901 83F88
G 02                            4.412                         .038
G 01 TP6                    P F8 NL                         0901 83F88
G 02                            4.174                         .039
G 01 MW1                    P F8 MW-2                       0901 83F88
G 99 S. WESTERLY WELL N. SIDE OF TOP OF OUTER CASING
G 02                            4.553
G 01 MW2                    P F8 MW-2                       0901 83F88
```

```
G 99 S. WESTERLY WELL-N. SIDE OF TOP OF 2"PVC WELL
G 02                                4.337   GW2                  .040
G 01 MW3                        P F8 MW-4                     0901 83F88
G 99 N. EASTERLY WELL N.SIDE OF TOP OF OUTER CASING
G 02                                4.550
G 01 MW4                        P F8 MW                       0901 83F88
G 99 N. EASTERLY WELL N. SIDE OF TOP OF 2" PVC WELL
G 02                                4.407   GW1                  .040
G 01 TP7                        P F8 TP#6 BEG                 0901 83F88
G 02                                4.178                        .039
G 01 FTP1                       P F8 NL-TP#8-4.416 TP#5 BEG   0901 83F88
G 99 BURGER KING CONT. FROM SEG M.
G 02                                4.413                        .038
G 01 FTP2                       P F8 NL                       0901 83F88
G 02                                5.391                        .035
G 01 FTP3                       P F8 NL                       0901 83F88
G 02                                5.075                        .032
G 01 FTP4                       P F8 NL                       0901 83F88
G 02                                4.990                        .027
G 01 FTP5                       P F8 NL                       0901 83F88
G 02                                7.718                        .020
G 01 FTP6                       P F8 NL-TP#9                  0901 83F88
G 99 TP#9 SAM HALLS LEVEL RUN DOWN OLD CUTLER RD.
G 02                               10.828                        .000
```

```
1834FM.OBS
H 00 1834M                    12:50:20 11/15/95  12:50:20 11/15/95 ENGLISH   2.55
H 99 ELEV RUN TASK#5 BISCAYNE BAY WELLS
C 00 12:52:47 11/15/95  90 30.0 000001 DF  CC  NL
C 01 WILD       NA2000                     100
C 00 12:52:56 11/15/95  90 30.0 000001 DF  CC  NL
C 01 WILD       NA2000     90273           100
S 00 S1                        P G8
S 01 12:54:03 11/15/95  1.000
O 00 BM1                       P F8 NL-TP10
O 09 13:09:23                                                5.656  4.248  2.840
O 00 TP1                       P F8 NL
O 09 13:13:30                                                9.268  7.842  6.416
S 00 S2                        P G8
S 01 13:13:35 11/15/95  1.000
O 00 TP1                       P F8 NL
O 09 13:16:09                                                3.830  2.686  1.542
O 00 TP2                       P F8 NL
O 09 13:18:23                                                6.799  5.419  4.039
S 00 S3                        P G8
S 01 13:18:28 11/15/95  1.000
O 00 TP2                       P F8 NL
O 09 13:23:22                                                5.537  4.782  4.027
O 00 TP3                       P F8 NL
O 09 13:25:02                                                5.285  4.699  4.113
S 00 S4                        P G8
S 01 13:25:10 11/15/95  1.000
O 00 TP3                       P F8 NL
O 09 13:28:47                                                6.228  4.988  3.748
O 00 TP4                       P F8 NL
O 09 13:30:40                                                5.595  4.673  3.751
S 00 S5                        P G8
S 01 13:30:46 11/15/95  1.000
O 00 TP4                       P F8 NL
O 09 13:34:15                                                5.281  3.859  2.437
O 00 TP5                       P F8 NL
O 09 13:37:37                                                5.902  4.824  3.746
S 00 S6                        P G8
S 01 13:37:41 11/15/95  1.000
O 00 TP5                       P F8 NL
O 09 13:40:03                                                5.852  4.728  3.604
O 00 TP6                       P F8 NL
O 09 13:42:23                                                6.305  4.965  3.625
S 00 S7                        P G8
S 01 13:42:27 11/15/95  1.000
O 00 TP6                       P F8 NL
O 09 13:45:59                                                5.079  4.611  4.143
O 00 MW1                       P F8 MW-2
O 99 S. WESTERLY WELL N. SIDE OF TOP OF OUTER CASING
O 09 14:03:44                                                4.761  4.232  3.703
O 00 MW2                       P F8 MW-2
O 99 S. WESTERLY WELL-N. SIDE OF TOP OF 2"PVC WELL
O 09 14:02:33                                                4.977  4.448  3.919
S 00 S8                        P G8
S 01 14:05:15 11/15/95  1.000
O 00 MW2                       P F8 MW-4
O 99 S. WESTERLY WELL-N. SIDE OF TOP OF 2"PVC WELL
O 09 14:06:21                                                4.944  4.412  3.880
O 00 MW3                       P F8 MW-4
O 99 N. EASTERLY WELL N.SIDE OF TOP OF OUTER CASING
O 09 14:09:09                                                4.764  4.199  3.634
O 00 MW4                       P F8 MW
O 99 N. EASTERLY WELL N. SIDE OF TOP OF 2" PVC WELL
O 09 14:11:17                                                4.905  4.342  3.779
S 00 S9                        P G8
S 01 14:14:26 11/15/95  1.000
O 00 MW4                       P F8 MW
O 99 N. EASTERLY WELL N. SIDE OF TOP OF 2" PVC WELL
O 09 14:15:15                                                4.873  4.308  3.743
O 00 TP7                       P F8 TP#6 BEG
```

```
O 09 14:25:36                                                  5.002  4.537  4.072
S 00 S10                      P G8
S 01 14:25:42 11/15/95  1.000
O 00 TP7                      P F8 TP#6 BEB
O 09 14:28:24                                                  6.195  4.767  3.339
O 00 FTP1                     P F8 NL-TP#8-4.416 TP#5 BEG
O 09 14:30:14                                                  5.567  4.531  3.495
S 00 S1                       P G1
S 01 08:40:47 11/16/95  1.000
O 00 FTP1                     P F8 NL-TP#8-4.416 TP#5 BEG
O 99 BURGER KING CONT. FROM SEG M.
O 09 08:48:27                                                  6.059  5.047  4.035
O 00 FTP2                     P F8 NL
O 09 08:50:42                                                  5.575  4.069  2.563
S 00 S2                       P G1
S 01 08:50:59 11/16/95  1.000
O 00 FTP2                     P F8 NL
O 09 08:55:38                                                  5.436  4.385  3.334
O 00 FTP3                     P F8 NL
O 09 08:57:52                                                  5.804  4.701  3.598
S 00 S3                       P G1
S 01 08:58:09 11/16/95  1.000
O 00 FTP3                     P F8 NL
O 09 09:02:48                                                  4.827  4.055  3.283
O 00 FTP4                     P F8 NL
O 09 09:04:19                                                  4.718  4.140  3.562
S 00 S4                       P G1
S 01 09:04:33 11/16/95  1.000
O 00 FTP4                     P F8 NL
O 09 09:10:20                                                  7.108  5.817  4.526
O 00 FTP5                     P F8 NL
O 09 09:12:40                                                  4.320  3.088  1.856
S 00 S5                       P G1
S 01 09:13:07 11/16/95  1.000
O 00 FTP5                     P F8 NL
O 09 09:19:38                                                  9.190  7.652  6.114
O 00 FTP6                     P F8 NL-TP#9
O 99 TP#9 SAM HALLS LEVEL RUN DOWN OLD CUTLER RD.
O 09 09:24:15                                                  5.856  4.542  3.228
OD09 04:57:35                                                  5.092  3.768  2.444
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING               10 99 100
C 03 00:00:00                    D   0  0  0.0  90  0  0.0
C 03 00:00:00                    D   0  0  0.0  90  0  0.0
C 03 00:00:00                    R 180  0  0.0 270  0  0.0
C 03 00:00:00                    R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S13,BM1,TP11,MW4
‘↕F2–    3¶”ñ┬‘↕^”– €¤  ¤  x*ª→–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
  STATIONS           MISCLOSURE
END OF MISCLOSURE REPORT

   12 OF    28 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
BAND IS   1 STATIONS
LEVEL NETWORK ADJUSTMENT

NUMBER OF BENCHMARKS =     2
NUMBER OF STATIONS =    16
NUMBER OF MEASUREMENTS =    15
NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       31

RESULTS OF ADJUSTMENT

BENCHMARK ELEVATION RESIDUALS

  STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

  BM1               12.827             12.827         .000        .000  ( .0)
  FTP6              12.348             12.348         .000        .000  ( .0)

BENCHMARK RMS ERROR =       .000 SNOOP RMS =   .0
MAX. BENCHMARK RESIDUAL AT STATION         BM1      OF       .000


RESIDUALS

  FROM          TO             MEASURED      RESIDUAL      EST. ERROR

  BM1           TP1              -3.594          .000  ( .0)    .010
  TP1           TP2              -2.733          .000  ( .0)    .010
  TP2           TP3                .083          .000  ( .0)    .010
  TP3           TP4                .315          .000  ( .0)    .010
  TP4           TP5               -.965          .000  ( .0)    .010
  TP5           TP6               -.237          .000  ( .0)    .010
  TP6           MW2                .163          .000  ( .0)    .010
  MW2           MW4                .070          .000  ( .0)    .010
  MW4           TP7               -.229          .000  ( .0)    .010
  TP7           FTP1               .236          .000  ( .0)    .010
  FTP1          FTP2               .978          .000  ( .0)    .010
  FTP2          FTP3              -.316          .000  ( .0)    .010
  FTP3          FTP4              -.085          .000  ( .0)    .010
  FTP4          FTP5              2.729          .000  ( .0)    .010
  FTP5          FTP6              3.110          .000  ( .0)    .010

ELEV. DIFF.  RMS ERROR =       .000 SNOOP RMS =   .0
MAX. ELEV. DIFF. RESIDUAL         FTP5     -         FTP6     OF       .000


95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR    1 D.F. IS 20.00

   STATION        ADJUSTED ELEV.     STANDARD ERROR

   BM1                   12.827               .000
   TP1                    9.233               .020
   TP2                    6.499               .027
   TP3                    6.582               .032
   TP4                    6.897               .035
   TP5                    5.932               .038
   TP6                    5.694               .039
   MW2                    5.857               .040
   MW4                    5.927               .040
   TP7                    5.698               .039
   FTP1                   5.933               .038
   FTP2                   6.911               .035
   FTP3                   6.595               .032
   FTP4                   6.510               .027
   FTP5                   9.238               .020
   FTP6                  12.348               .000
```

```
     STANDARD ERROR OF UNIT WEIGHT IS       .103
      WITH    1 DEGREES OF FREEDOM

 CHI SQUARED TEST ON ANALYSIS
   .031 <   .103 <  1.960
   (LOW)             (HIGH)
 PASSES AT THE 5 % SIGNIFICANCE LEVEL
```

```
1834FM.CHL
         PROJECT NAME IS 1834FM

 ELEVATION CLOSURE REPORT
 SUM OF DISTANCES ALONG SURVEY IS       6177.900
 CLOSURE IN ELEVATION (Z) =    -.004
 CLOSURE PER STATION =     .000
 PRECISION = 1 /     1544475.
     STATION          ELEVATION (Z)
         BM1                12.827
         TP1                 9.233
         TP2                 6.499
         TP3                 6.582
         TP4                 6.897
         TP5                 5.932
         TP6                 5.694
         MW2                 5.857
         MW4                 5.927
         TP7                 5.698
         FTP1                5.933
         FTP2                6.911
         FTP3                6.595
         FTP4                6.510
         FTP5                9.238
         FTP6               12.348
```

```
 TOTAL LENGTH OF EVALUATED SURVEY DISTANCE =      1.170 MILES
 OVERALL PRECISION = 1 /     1544475.
```

```
1834FM.CTL
G 00 1834FM
G 01 BM1      TP10        P F8 IRC TP10 FB682 P6             0901 83F29
G 02                           12.8270                          .0001
G 01 FTP6     FTP6        P F8 IRC TP9  FB682 P6             0901 83F29
G 02                           12.3480                          .0001
G 99   IT SEEMS THAT WE HAVE 2 FB WITH THE SAME #682
```

```
1834FM.XYZ
G 00         1834FM.XYZ
G 01 BM1                    P F8 NL-TP10                     0901 83F29
G 02                            12.827                          .000
G 01 TP1                    P F8 NL                          0901 83F29
G 02                            9.233                           .020
G 01 TP2                    P F8 NL                          0901 83F29
G 02                            6.499                           .027
G 01 TP3                    P F8 NL                          0901 83F29
G 02                            6.582                           .032
G 01 TP4                    P F8 NL                          0901 83F29
G 02                            6.897                           .035
G 01 TP5                    P F8 NL                          0901 83F29
G 02                            5.932                           .038
G 01 TP6                    P F8 NL                          0901 83F29
G 02                            5.694                           .039
G 01 MW1                    P F8 MW-2                        0901 83F29
G 99 S. WESTERLY WELL N. SIDE OF TOP OF OUTER CASING
G 02                            6.073
G 01 MW2                    P F8 MW-2                        0901 83F29
G 99 S. WESTERLY WELL-N. SIDE OF TOP OF 2"PVC WELL
```

```
G 02                                   5.857   GW2                  .040
G 01 MW3                          P F8 MW-4                      0901 83F29
G 99 N. EASTERLY WELL N.SIDE OF TOP OF OUTER CASING
G 02                                   6.070
G 01 MW4                          P F8 MW                        0901 83F29
G 99 N. EASTERLY WELL N. SIDE OF TOP OF 2" PVC WELL
G 02                                   5.927   GW1                  .040
G 01 TP7                          P F8 TP#6 BEG                  0901 83F29
G 02                                   5.698                        .039
G 01 FTP1                         P F8 NL-TP#8-4.416 TP#5 BEG   0901 83F29
G 99 BURGER KING CONT. FROM SEG M.
G 02                                   5.933                        .038
G 01 FTP2                         P F8 NL                        0901 83F29
G 02                                   6.911                        .035
G 01 FTP3                         P F8 NL                        0901 83F29
G 02                                   6.595                        .032
G 01 FTP4                         P F8 NL                        0901 83F29
G 02                                   6.510                        .027
G 01 FTP5                         P F8 NL                        0901 83F29
G 02                                   9.238                        .020
G 01 FTP6                         P F8 NL-TP#9                   0901 83F29
G 99 TP#9 SAM HALLS LEVEL RUN DOWN OLD CUTLER RD.
G 02                                  12.348                        .000
```

```
1834G.OBS
H 00 1834G                    10:11:38 11/16/95  10:11:38 11/16/95 ENGLISH   2.55
H 99 BISCAYNE BAY WELLS
C 00 11:19:04 11/16/95  90 30.0 000001 DF  TB  NL
C 01 WILD       NA2000     90273            100
C 13 11:25:43  3.79  4.18  4.61  5.00
S 00 S1                          P G1
S 01 11:26:39 11/16/95  1.000
SM00 S1                          P F8
SM01 11:26:02 11/16/95  1.000
O 00 GBM1                        P F8 CMON-DCBM-R724
O 09 11:31:09                                                6.885  5.800  4.715
O 00 GTP1                        P F8 NL-60D
O 09 11:33:09                                                5.619  4.478  3.337
S 00 S2                          P G1
S 01 11:33:22 11/16/95  1.000
O 00 GTP1                        P F8 NL-60D
O 09 11:36:42                                                5.785  4.457  3.129
O 00 GTP2                        P F8 NL-60D
O 09 11:38:42                                                6.117  4.934  3.751
S 00 S3                          P G1
S 01 11:38:58 11/16/95  1.000
O 00 GTP2                        P F8 NL-60D
O 09 11:41:16                                                5.727  4.840  3.953
O 00 GTP3                        P F8 NL-60D
O 09 11:47:04                                                8.363  7.479  6.595
S 00 S4                          P G1
S 01 11:47:24 11/16/95  1.000
O 00 GTP3                        P F8 NL-60D
O 09 11:50:29                                                3.334  2.011  0.688
O 00 GTP4                        P F8 NL-60D
O 09 11:54:38                                                5.940  4.628  3.316
S 00 S5                          P G1
S 01 11:54:52 11/16/95  1.000
O 00 GTP4                        P F8 NL-60D
O 09 11:57:52                                                6.261  4.985  3.709
O 00 GTP5                        P F8 NL-60D
O 09 11:59:47                                                6.321  5.147  3.973
S 00 S6                          P G1
S 01 12:00:03 11/16/95  1.000
O 00 GTP5                        P F8 NL-60D
O 09 12:02:52                                                6.836  5.432  4.028
O 00 GTP6                        P F8 NL-60D
O 09 12:08:08                                                6.778  5.246  3.714
S 00 S7                          P G1
S 01 12:08:22 11/16/95  1.000
O 00 GTP6                        P F8 NL-60D
O 09 12:11:01                                                6.064  4.765  3.466
O 00 GTP7                        P F8 NL-60D
O 09 12:13:08                                                6.005  4.572  3.139
S 00 S8                          P G1
S 01 12:13:22 11/16/95  1.000
O 00 GTP7                        P F8 NL-60D
O 09 12:16:50                                                5.926  4.766  3.606
O 00 GTP8                        P F8 NL-60D
O 09 12:18:53                                                6.075  4.653  3.231
S 00 S9                          P G1
S 01 12:19:09 11/16/95  1.000
O 00 GTP8                        P F8 NL-60D
O 09 12:22:32                                                6.216  4.729  3.242
O 00 GTP9                        P F8 NL-60D
O 09 12:25:00                                                6.326  5.078  3.830
S 00 S10                         P G1
S 01 12:25:15 11/16/95  1.000
O 00 GTP9                        P F8 NL-60D
O 09 12:27:40                                                5.956  4.689  3.422
O 00 GTP10                       P F8 NL-60D
O 09 12:29:28                                                6.307  4.882  3.457
SD00 S11                         P G1
SD01 12:29:52 11/16/95  1.000
```

```
O 00 GMONW1                    P F8 MONW-OUTER CASEING
O 99 SHOT TAKEN @ NORTH SIDE OF OUTER WELL CASEING
O 09 12:38:49                                          5.169  4.485  3.801
O 00 GMONW2                    P F8 MONW-2" PVC
O 99 SHOT TAKEN @ NORTH SIDE OF 2" PVC WELL
O 09 12:41:28                                          5.267  4.585  3.903
S 00 S12                       P G1
S 01 12:42:21 11/16/95  1.000
O 00 GMONW2                    P F8 MONW-2" PVC
O 99 SHOT TAKEN @ NORTH SIDE OF 2" PVC WELL
O 09 13:14:51                                          5.610  4.532  3.454
O 00 GTP11                     P F8 NL-60D
O 09 13:17:55                                          5.380  4.459  3.538
S 00 S13                       P G1
S 01 13:18:01 11/16/95  1.000
O 00 GTP11                     P F8 NL-60D
O 09 13:22:05                                          5.432  4.467  3.502
O 00 GTP12                     P F8 NL-60D
O 09 13:25:04                                          5.710  4.438  3.166
S 00 S14                       P G1
S 01 13:25:22 11/16/95  1.000
O 00 GTP12                     P F8 NL-60D
O 09 13:28:15                                          6.042  4.824  3.606
O 00 GTP13                     P F8 NL-60D
O 09 13:30:50                                          6.165  4.807  3.449
S 00 S15                       P G1
S 01 13:31:05 11/16/95  1.000
O 00 GTP13                     P F8 NL-60D
O 09 13:34:18                                          6.554  5.044  3.534
O 00 GTP14                     P F8 NL-60D
O 09 13:36:16                                          6.113  4.860  3.607
S 00 S16                       P G1
S 01 13:36:28 11/16/95  1.000
O 00 GTP14                     P F8 NL-60D
O 09 13:39:02                                          6.163  4.721  3.279
O 00 GTP15                     P F8 NL-60D
O 09 13:41:27                                          5.965  4.676  3.387
S 00 S17                       P G1
S 01 13:41:41 11/16/95  1.000
O 00 GTP15                     P F8 NL-60D
O 09 13:44:39                                          6.019  4.638  3.257
O 00 GTP16                     P F8 NL-60D
O 09 13:46:26                                          6.176  4.846  3.516
S 00 S18                       P G1
S 01 13:46:40 11/16/95  1.000
O 00 GTP16                     P F8 NL-60D
O 09 13:49:37                                          6.018  4.562  3.106
O 00 GTP17                     P F8 NL-60D
O 09 13:51:49                                          6.148  4.798  3.448
S 00 S19                       P G1
S 01 13:52:01 11/16/95  1.000
O 00 GTP17                     P F8 NL-60D
O 09 13:54:48                                          6.164  4.847  3.530
O 00 GTP18                     P F8 NL-60D
O 09 13:56:30                                          6.227  4.892  3.557
S 00 S20                       P G1
S 01 13:56:47 11/16/95  1.000
O 00 GTP18                     P F8 NL-60D
O 09 13:59:42                                          6.592  5.171  3.750
O 00 GTP19                     P F8 NL-60D
O 09 14:01:38                                          5.852  4.744  3.636
S 00 S21                       P G1
S 01 14:01:50 11/16/95  1.000
O 00 GTP19                     P F8 NL-60D
O 09 14:04:20                                          6.738  5.316  3.894
O 00 GTP20                     P F8 NL-60D
O 09 14:06:21                                          6.042  4.610  3.178
S 00 S22                       P G1
S 01 14:06:32 11/16/95  1.000
O 00 GTP20                     P F8 NL-60D
```

```
O 09 14:10:34                                                  11.450  9.949  8.448
O 00 GBM2                          P F8 CMON-DCBM-R722
O 09 14:14:15                                                   7.525  6.486  5.447
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S22,GBM2,GTP20,GMONW2
‘↕F2–    2¶“ñ┬‘↕^”– €¤  ¤  x* ♬–┼          “Ò“¼└‘↕^”–♬—  ¦☼–ï┤j☼—â“×└‘↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834H.1D
 MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 END OF MISCLOSURE REPORT

    23 OF    45 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    22
 NUMBER OF MEASUREMENTS =    21
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       43

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

   GBM1              5.330             5.330         .000         .000  ( .0)
   GBM2              5.330             5.330         .000         .000  ( .0)

 BENCHMARK RMS ERROR =       .000 SNOOP RMS =   .0
 MAX. BENCHMARK RESIDUAL AT STATION         GBM2     OF       .000


 RESIDUALS

   FROM          TO            MEASURED      RESIDUAL      EST. ERROR

   GBM1          GTP1             1.322         -.006  ( .6)    .010
   GTP1          GTP2             -.477         -.006  ( .6)    .010
   GTP2          GTP3            -2.639         -.006  ( .6)    .010
   GTP3          GTP4            -2.617         -.006  ( .6)    .010
   GTP4          GTP5             -.162         -.006  ( .6)    .010
   GTP5          GTP6              .186         -.006  ( .6)    .010
   GTP6          GTP7              .193         -.006  ( .6)    .010
   GTP7          GTP8              .113         -.006  ( .6)    .010
   GTP8          GTP9             -.349         -.006  ( .6)    .010
```

GTP9	GMONW2	.104	-.006	(.6)	.010
GMONW2	GTP11	.073	-.006	(.6)	.010
GTP11	GTP12	.029	-.006	(.6)	.010
GTP12	GTP13	.017	-.006	(.6)	.010
GTP13	GTP14	.184	-.006	(.6)	.010
GTP14	GTP15	.045	-.006	(.6)	.010
GTP15	GTP16	-.208	-.006	(.6)	.010
GTP16	GTP17	-.236	-.006	(.6)	.010
GTP17	GTP18	-.045	-.006	(.6)	.010
GTP18	GTP19	.427	-.006	(.6)	.010
GTP19	GTP20	.706	-.006	(.6)	.010
GTP20	GBM2	3.463	-.006	(.6)	.010

ELEV. DIFF. RMS ERROR = .006 SNOOP RMS = .6
MAX. ELEV. DIFF. RESIDUAL GBM1 - GTP1 OF .006

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
GBM1	5.330	.006
GTP1	6.646	.549
GTP2	6.163	.757
GTP3	3.518	.903
GTP4	.894	1.013
GTP5	.726	1.099
GTP6	.906	1.166
GTP7	1.093	1.216
GTP8	1.200	1.253
GTP9	.845	1.277
GMONW2	.943	1.289
GTP11	1.009	1.289
GTP12	1.032	1.277
GTP13	1.043	1.253
GTP14	1.221	1.216
GTP15	1.260	1.166
GTP16	1.046	1.099
GTP17	.804	1.013
GTP18	.752	.903
GTP19	1.173	.757
GTP20	1.873	.549
GBM2	5.330	.006

STANDARD ERROR OF UNIT WEIGHT IS 2.815
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < 2.815 < 1.960
(LOW) (HIGH)
DOES NOT PASS AT THE 5 % SIGNIFICANCE LEVEL

1834G.CHL

PROJECT NAME IS 1834G

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 10217.300
CLOSURE IN ELEVATION (Z) = -.129
CLOSURE PER STATION = -.006
PRECISION = 1 / 79204.

STATION	ELEVATION (Z)
GBM1	5.330
GTP1	6.646
GTP2	6.163
GTP3	3.518
GTP4	.894
GTP5	.726

```
GTP6                .906
GTP7               1.093
GTP8               1.200
GTP9                .845
GMONW2              .943
GTP11              1.009
GTP12              1.032
GTP13              1.043
GTP14              1.221
GTP15              1.260
GTP16              1.046
GTP17               .804
GTP18               .752
GTP19              1.173
GTP20              1.873
GBM2               5.330
```

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 1.935 MILES
OVERALL PRECISION = 1 / 79204.

1834G.CTL

```
G 00 1834G
G 01 GBM1     GBM1        P F8 IRC R-724                    0901 83F88
G 02                           5.3300                          .0001
G 01 GBM2     GBM2        P F8 IRC R-722                    0901 83F88
G 02                           5.3300                          .0001
```

1834G.XYZ

```
G 00         1834G.XYZ
G 01 GBM1                   P F8 CMON-DCBM-R724              0901 83F88
G 02                           5.330                           .006
G 01 GTP1                   P F8 NL-60D                      0901 83F88
G 02                           6.646                           .549
G 01 GTP2                   P F8 NL-60D                      0901 83F88
G 02                           6.163                           .757
G 01 GTP3                   P F8 NL-60D                      0901 83F88
G 02                           3.518                           .903
G 01 GTP4                   P F8 NL-60D                      0901 83F88
G 02                            .894                          1.013
G 01 GTP5                   P F8 NL-60D                      0901 83F88
G 02                            .726                          1.099
G 01 GTP6                   P F8 NL-60D                      0901 83F88
G 02                            .906                          1.166
G 01 GTP7                   P F8 NL-60D                      0901 83F88
G 02                           1.093                          1.216
G 01 GTP8                   P F8 NL-60D                      0901 83F88
G 02                           1.200                          1.253
G 01 GTP9                   P F8 NL-60D                      0901 83F88
G 02                            .845                          1.277
G 01 GTP10                  P F8 NL-60D                      0901 83F88
G 02                            .652
G 01 GMONW1                 P F8 MONW-OUTER CASEING          0901 83F88
G 99 SHOT TAKEN @ NORTH SIDE OF OUTER WELL CASEING
G 02                           1.049
G 01 GMONW2                 P F8 MONW-2" PVC                 0901 83F88
G 99 SHOT TAKEN @ NORTH SIDE OF 2" PVC WELL
G 02                            .943                          1.289
G 01 GTP11                  P F8 NL-60D                      0901 83F88
G 02                           1.009                          1.289
G 01 GTP12                  P F8 NL-60D                      0901 83F88
G 02                           1.032                          1.277
G 01 GTP13                  P F8 NL-60D                      0901 83F88
G 02                           1.043                          1.253
G 01 GTP14                  P F8 NL-60D                      0901 83F88
G 02                           1.221                          1.216
G 01 GTP15                  P F8 NL-60D                      0901 83F88
G 02                           1.260                          1.166
```

```
G 01 GTP16                  P F8 NL-60D                 0901 83F88
G 02                            1.046                     1.099
G 01 GTP17                  P F8 NL-60D                 0901 83F88
G 02                             .804                     1.013
G 01 GTP18                  P F8 NL-60D                 0901 83F88
G 02                             .752                      .903
G 01 GTP19                  P F8 NL-60D                 0901 83F88
G 02                            1.173                      .757
G 01 GTP20                  P F8 NL-60D                 0901 83F88
G 02                            1.873                      .549
G 01 GBM2                   P F8 CMON-DCBM-R722          0901 83F88
G 02                            5.330                      .006
```

```
H 00 1834G                    10:11:38 11/16/95  10:11:38 11/16/95 ENGLISH   2.55
H 99 BISCAYNE BAY WELLS
C 00 11:19:04 11/16/95  90 30.0 000001 DF  TB  NL
C 01 WILD       NA2000     90273            100
C 13 11:25:43  3.79  4.18  4.61  5.00
S 00 S1                          P G1
S 01 11:26:39 11/16/95  1.000
SM00 S1                          P F8
SM01 11:26:02 11/16/95  1.000
O 00 GBM1                        P F8 CMON-DCBM-R724
O 09 11:31:09                                                  6.885  5.800  4.715
O 00 GTP1                        P F8 NL-60D
O 09 11:33:09                                                  5.619  4.478  3.337
S 00 S2                          P G1
S 01 11:33:22 11/16/95  1.000
O 00 GTP1                        P F8 NL-60D
O 09 11:36:42                                                  5.785  4.457  3.129
O 00 GTP2                        P F8 NL-60D
O 09 11:38:42                                                  6.117  4.934  3.751
S 00 S3                          P G1
S 01 11:38:58 11/16/95  1.000
O 00 GTP2                        P F8 NL-60D
O 09 11:41:16                                                  5.727  4.840  3.953
O 00 GTP3                        P F8 NL-60D
O 09 11:47:04                                                  8.363  7.479  6.595
S 00 S4                          P G1
S 01 11:47:24 11/16/95  1.000
O 00 GTP3                        P F8 NL-60D
O 09 11:50:29                                                  3.334  2.011  0.688
O 00 GTP4                        P F8 NL-60D
O 09 11:54:38                                                  5.940  4.628  3.316
S 00 S5                          P G1
S 01 11:54:52 11/16/95  1.000
O 00 GTP4                        P F8 NL-60D
O 09 11:57:52                                                  6.261  4.985  3.709
O 00 GTP5                        P F8 NL-60D
O 09 11:59:47                                                  6.321  5.147  3.973
S 00 S6                          P G1
S 01 12:00:03 11/16/95  1.000
O 00 GTP5                        P F8 NL-60D
O 09 12:02:52                                                  6.836  5.432  4.028
O 00 GTP6                        P F8 NL-60D
O 09 12:08:08                                                  6.778  5.246  3.714
S 00 S7                          P G1
S 01 12:08:22 11/16/95  1.000
O 00 GTP6                        P F8 NL-60D
O 09 12:11:01                                                  6.064  4.765  3.466
O 00 GTP7                        P F8 NL-60D
O 09 12:13:08                                                  6.005  4.572  3.139
S 00 S8                          P G1
S 01 12:13:22 11/16/95  1.000
O 00 GTP7                        P F8 NL-60D
O 09 12:16:50                                                  5.926  4.766  3.606
O 00 GTP8                        P F8 NL-60D
O 09 12:18:53                                                  6.075  4.653  3.231
S 00 S9                          P G1
S 01 12:19:09 11/16/95  1.000
O 00 GTP8                        P F8 NL-60D
O 09 12:22:32                                                  6.216  4.729  3.242
O 00 GTP9                        P F8 NL-60D
O 09 12:25:00                                                  6.326  5.078  3.830
S 00 S10                         P G1
S 01 12:25:15 11/16/95  1.000
O 00 GTP9                        P F8 NL-60D
O 09 12:27:40                                                  5.956  4.689  3.422
O 00 GTP10                       P F8 NL-60D
O 09 12:29:28                                                  6.307  4.882  3.457
SD00 S11                         P G1
SD01 12:29:52 11/16/95  1.000
O 00 GMONW1                      P F8 MONW-OUTER CASEING
```

```
O 99 SHOT TAKEN @ NORTH SIDE OF OUTER WELL CASEING
O 09 12:38:49                                                5.169  4.485  3.801
O 00 GMONW2                      P F8 MONW-2" PVC
O 99 SHOT TAKEN @ NORTH SIDE OF 2" PVC WELL   GW2
O 09 12:41:28                                                5.267  4.585  3.903
S 00 S12                         P G1
S 01 12:42:21 11/16/95  1.000
O 00 GMONW2                      P F8 MONW-2" PVC
O 99 SHOT TAKEN @ NORTH SIDE OF 2" PVC WELL   GW1
O 09 13:14:51                                                5.610  4.532  3.454
O 00 GTP11                       P F8 NL-60D
O 09 13:17:55                                                5.380  4.459  3.538
S 00 S13                         P G1
S 01 13:18:01 11/16/95  1.000
O 00 GTP11                       P F8 NL-60D
O 09 13:22:05                                                5.432  4.467  3.502
O 00 GTP12                       P F8 NL-60D
O 09 13:25:04                                                5.710  4.438  3.166
S 00 S14                         P G1
S 01 13:25:22 11/16/95  1.000
O 00 GTP12                       P F8 NL-60D
O 09 13:28:15                                                6.042  4.824  3.606
O 00 GTP13                       P F8 NL-60D
O 09 13:30:50                                                6.165  4.807  3.449
S 00 S15                         P G1
S 01 13:31:05 11/16/95  1.000
O 00 GTP13                       P F8 NL-60D
O 09 13:34:18                                                6.554  5.044  3.534
O 00 GTP14                       P F8 NL-60D
O 09 13:36:16                                                6.113  4.860  3.607
S 00 S16                         P G1
S 01 13:36:28 11/16/95  1.000
O 00 GTP14                       P F8 NL-60D
O 09 13:39:02                                                6.163  4.721  3.279
O 00 GTP15                       P F8 NL-60D
O 09 13:41:27                                                5.965  4.676  3.387
S 00 S17                         P G1
S 01 13:41:41 11/16/95  1.000
O 00 GTP15                       P F8 NL-60D
O 09 13:44:39                                                6.019  4.638  3.257
O 00 GTP16                       P F8 NL-60D
O 09 13:46:26                                                6.176  4.846  3.516
S 00 S18                         P G1
S 01 13:46:40 11/16/95  1.000
O 00 GTP16                       P F8 NL-60D
O 09 13:49:37                                                6.018  4.562  3.106
O 00 GTP17                       P F8 NL-60D
O 09 13:51:49                                                6.148  4.798  3.448
S 00 S19                         P G1
S 01 13:52:01 11/16/95  1.000
O 00 GTP17                       P F8 NL-60D
O 09 13:54:48                                                6.164  4.847  3.530
O 00 GTP18                       P F8 NL-60D
O 09 13:56:30                                                6.227  4.892  3.557
S 00 S20                         P G1
S 01 13:56:47 11/16/95  1.000
O 00 GTP18                       P F8 NL-60D
O 09 13:59:42                                                6.592  5.171  3.750
O 00 GTP19                       P F8 NL-60D
O 09 14:01:38                                                5.852  4.744  3.636
S 00 S21                         P G1
S 01 14:01:50 11/16/95  1.000
O 00 GTP19                       P F8 NL-60D
O 09 14:04:20                                                6.738  5.316  3.894
O 00 GTP20                       P F8 NL-60D
O 09 14:06:21                                                6.042  4.610  3.178
S 00 S22                         P G1
S 01 14:06:32 11/16/95  1.000
O 00 GTP20                       P F8 NL-60D
O 09 14:10:34                                               11.450  9.949  8.448
```

```
O 00 GBM2                        P F8 CMON-DCBM-R722
O 09 14:14:15                                                  7.525  6.486  5.447
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S22,GBM2,GTP20,GMONW2
‘↕F2–    2¶“ñ┬’↕^”– €¤  ¤  x* ♬–┼          “Ò“¼└’↕^”–♬—  ¦☼–ï┤j☼—â“×└’↕^”–
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
1834G.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 END OF MISCLOSURE REPORT

    23 OF    45 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   1 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    22
 NUMBER OF MEASUREMENTS =    21
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =       43

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

   GBM1               6.850              6.850         .000         .000  ( .0)
   GBM2               6.850              6.850         .000         .000  ( .0)

 BENCHMARK RMS ERROR =       .000 SNOOP RMS =   .0
 MAX. BENCHMARK RESIDUAL AT STATION         GBM2     OF       .000


 RESIDUALS

   FROM          TO            MEASURED      RESIDUAL      EST. ERROR

   GBM1          GTP1             1.322         -.006  ( .6)    .010
   GTP1          GTP2              -.477         -.006  ( .6)    .010
   GTP2          GTP3             -2.639         -.006  ( .6)    .010
   GTP3          GTP4             -2.617         -.006  ( .6)    .010
   GTP4          GTP5              -.162         -.006  ( .6)    .010
   GTP5          GTP6              .186          -.006  ( .6)    .010
   GTP6          GTP7              .193          -.006  ( .6)    .010
   GTP7          GTP8              .113          -.006  ( .6)    .010
   GTP8          GTP9             -.349          -.006  ( .6)    .010
   GTP9          GMONW2            .104          -.006  ( .6)    .010
```

GMONW2	GTP11	.073	-.006	(.6)	.010
GTP11	GTP12	.029	-.006	(.6)	.010
GTP12	GTP13	.017	-.006	(.6)	.010
GTP13	GTP14	.184	-.006	(.6)	.010
GTP14	GTP15	.045	-.006	(.6)	.010
GTP15	GTP16	-.208	-.006	(.6)	.010
GTP16	GTP17	-.236	-.006	(.6)	.010
GTP17	GTP18	-.045	-.006	(.6)	.010
GTP18	GTP19	.427	-.006	(.6)	.010
GTP19	GTP20	.706	-.006	(.6)	.010
GTP20	GBM2	3.463	-.006	(.6)	.010

ELEV. DIFF. RMS ERROR = .006 SNOOP RMS = .6
MAX. ELEV. DIFF. RESIDUAL GTP20 - GBM2 OF .006

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 1 D.F. IS 20.00

STATION	ADJUSTED ELEV.	STANDARD ERROR
GBM1	6.850	.006
GTP1	8.166	.549
GTP2	7.683	.757
GTP3	5.038	.903
GTP4	2.414	1.013
GTP5	2.246	1.099
GTP6	2.426	1.166
GTP7	2.613	1.216
GTP8	2.720	1.253
GTP9	2.365	1.277
GMONW2	2.463	1.289
GTP11	2.529	1.289
GTP12	2.552	1.277
GTP13	2.563	1.253
GTP14	2.741	1.216
GTP15	2.780	1.166
GTP16	2.566	1.099
GTP17	2.324	1.013
GTP18	2.272	.903
GTP19	2.693	.757
GTP20	3.393	.549
GBM2	6.850	.006

STANDARD ERROR OF UNIT WEIGHT IS 2.815
WITH 1 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.031 < 2.815 < 1.960
(LOW) (HIGH)
DOES NOT PASS AT THE 5 % SIGNIFICANCE LEVEL

1834G.CHL

PROJECT NAME IS 1834G

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 10217.300
CLOSURE IN ELEVATION (Z) = -.129
CLOSURE PER STATION = -.006
PRECISION = 1 / 79204.

STATION	ELEVATION (Z)
GBM1	6.850
GTP1	8.166
GTP2	7.683
GTP3	5.038
GTP4	2.414
GTP5	2.246
GTP6	2.426

GTP7	2.613
GTP8	2.720
GTP9	2.365
GMONW2	2.463
GTP11	2.529
GTP12	2.552
GTP13	2.563
GTP14	2.741
GTP15	2.780
GTP16	2.566
GTP17	2.324
GTP18	2.272
GTP19	2.693
GTP20	3.393
GBM2	6.850

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 1.935 MILES
OVERALL PRECISION = 1 / 79204.

```
1834G.CTL
G 00 1834G
G 01 GBM1     GBM1        P F8 IRC R-724                    0901 83F29
G 02                           6.8500                          .0001
G 01 GBM2     GBM2        P F8 IRC R-722                    0901 83F29
G 02                           6.8500                          .0001
```

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1834G.XYZ
G 00         1834G.XYZ
G 01 GBM1                   P F8 CMON-DCBM-R724              0901 83F29
G 02                           6.850                           .006
G 01 GTP1                   P F8 NL-60D                      0901 83F29
G 02                           8.166                           .549
G 01 GTP2                   P F8 NL-60D                      0901 83F29
G 02                           7.683                           .757
G 01 GTP3                   P F8 NL-60D                      0901 83F29
G 02                           5.038                           .903
G 01 GTP4                   P F8 NL-60D                      0901 83F29
G 02                           2.414                          1.013
G 01 GTP5                   P F8 NL-60D                      0901 83F29
G 02                           2.246                          1.099
G 01 GTP6                   P F8 NL-60D                      0901 83F29
G 02                           2.426                          1.166
G 01 GTP7                   P F8 NL-60D                      0901 83F29
G 02                           2.613                          1.216
G 01 GTP8                   P F8 NL-60D                      0901 83F29
G 02                           2.720                          1.253
G 01 GTP9                   P F8 NL-60D                      0901 83F29
G 02                           2.365                          1.277
G 01 GTP10                  P F8 NL-60D                      0901 83F29
G 02                           2.172
G 01 GMONW1                 P F8 MONW-OUTER CASEING          0901 83F29
G 99 SHOT TAKEN @ NORTH SIDE OF OUTER WELL CASEING
G 02                           2.569                GW2
G 01 GMONW2                 P F8 MONW-2" PVC                 0901 83F29
G 99 SHOT TAKEN @ NORTH SIDE OF 2" PVC WELL
G 02                           2.463                          1.289
G 01 GTP11                  P F8 NL-60D                      0901 83F29
G 02                           2.529                          1.289
G 01 GTP12                  P F8 NL-60D                      0901 83F29
G 02                           2.552                          1.277
G 01 GTP13                  P F8 NL-60D                      0901 83F29
G 02                           2.563                          1.253
G 01 GTP14                  P F8 NL-60D                      0901 83F29
G 02                           2.741                          1.216
G 01 GTP15                  P F8 NL-60D                      0901 83F29
G 02                           2.780                          1.166
G 01 GTP16                  P F8 NL-60D                      0901 83F29
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G 02		2.566	1.099
G 01 GTP17	P F8	NL-60D	0901 83F29
G 02		2.324	1.013
G 01 GTP18	P F8	NL-60D	0901 83F29
G 02		2.272	.903
G 01 GTP19	P F8	NL-60D	0901 83F29
G 02		2.693	.757
G 01 GTP20	P F8	NL-60D	0901 83F29
G 02		3.393	.549
G 01 GBM2	P F8	CMON-DCBM-R722	0901 83F29
G 02		6.850	.006

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BMPALM.OBS
H 00 BMPALM                  08:55:33 12/07/95  08:55:33 12/07/95 ENGLISH   2.55
C 00 08:59:24 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
C 13 09:14:15  4.44  4.54  4.82  4.72
S 00 S1                        P F8
S 01 09:16:58 12/07/95  1.000
C 00 09:50:39 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
C 00 09:50:58 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
S 00 S1                        P F8
S 01 09:51:41 12/07/95  1.000
C 00 09:52:53 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
S 00 S1                        P F8
S 01 09:53:30 12/07/95  1.000
C 00 09:53:54 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       NA2000     90788            100
C 00 09:54:22 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       NA2000     90788            100
C 13 09:54:49  4.44  4.54  4.82  4.92
S 00 S1                        P F8
S 01 09:55:23 12/07/95  1.000
O 00 BM1       V314            P F8 STMD
O 09 09:57:13                                          3.757  3.406  3.055
O 00 TP1                       P F8
O 09 09:59:39                                          4.352  3.379  2.406
S 00 S2                        P F8
S 01 09:59:43 12/07/95  1.000
O 00 TP1                       P F8
O 09 10:13:30                                          5.355  4.013  2.671
O 00 TP2                       P F8
O 09 10:20:35                                          6.396  5.084  3.772
S 00 S3                        P F8
S 01 10:20:42 12/07/95  1.000
O 00 TP2                       P F8
O 09 10:23:41                                          6.037  4.708  3.379
O 00 TP3                       P F8
O 09 10:25:11                                          6.218  4.903  3.588
S 00 S4                        P F8
S 01 10:25:19 12/07/95  1.000
O 00 TP3                       P F8
O 09 10:27:54                                          6.586  5.257  3.928
O 00 TP4                       P F8
O 09 10:30:05                                          6.554  5.237  3.920
S 00 S5                        P F8
S 01 10:30:10 12/07/95  1.000
O 00 TP4                       P F8
O 09 10:36:11                                          5.885  4.546  3.207
O 00 TP5                       P F8
O 09 10:42:05                                          6.053  4.724  3.395
S 00 S6                        P F8
S 01 10:42:11 12/07/95  1.000
O 00 TP5                       P F8
O 09 10:45:28                                          5.484  4.219  2.954
O 00 BM2       8-ES            P F8 STMD
O 09 10:48:26                                          4.860  4.062  3.264
C 00 07:12:42 12/08/95  92 30.0 000001 CC  TC  GF
C 01 WILD       NA2000     90788            100
C 13 07:13:51  4.76  4.86  5.08  4.99
S 00 S7                        P G8
S 01 07:15:53 12/08/95  1.000
O 00 BM2       8-ES            P F8 STMD
O 09 07:26:42                                          4.454  4.176  3.898
O 00 TP6                       P F8 NL-TP10
O 09 07:27:51                                          5.005  4.534  4.063
S 00 S8                        P G8
S 01 07:27:55 12/08/95  1.000
O 00 TP6                       P F8 NL-TP10
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O 09 07:38:15                                                5.725  4.358  2.990
O 00 TP7                        P F8 NL-TP11
O 09 07:40:25                                                5.596  4.276  2.956
S 00 S9                         P G8
S 01 07:40:32 12/08/95  1.000
O 00 TP7                        P F8 NL-TP11
O 09 07:47:17                                                5.875  4.679  3.480
O 00 TP8                        P F8 NL-TP12
O 09 07:50:19                                                6.207  5.061  3.915
S 00 S10                        P G8
S 01 07:50:26 12/08/95  1.000
O 00 TP8                        P F8 NL-TP12
O 09 07:54:40                                                8.829  7.606  6.383
O 00 TP9                        P F8 NL-TP13
O 09 07:56:52                                                8.199  7.065  5.931
S 00 S11                        P G8
S 01 07:56:58 12/08/95  1.000
O 00 TP9                        P F8 NL-TP13
O 09 08:00:15                                                6.646  5.487  4.328
O 00 TP10                       P F8 NL-TP14
O 09 08:02:50                                                6.779  5.592  4.405
S 00 S12                        P G8
S 01 08:02:54 12/08/95  1.000
O 00 TP10                       P F8 NL-TP14
O 09 08:07:46                                                5.462  4.320  3.178
O 00 TP11                       P F8 NL-TP15
O 09 08:09:42                                                5.369  4.159  2.949
S 00 S13                        P G8
S 01 08:09:46 12/08/95  1.000
O 00 TP11                       P F8 NL-TP15
O 09 08:13:38                                                6.283  5.058  3.833
O 00 TP12                       P F8 NL-TP16
O 09 08:15:56                                                7.124  5.843  4.562
S 00 S14                        P G8
S 01 08:16:00 12/08/95  1.000
O 00 TP12                       P F8 NL-TP16
O 09 08:22:08                                                6.970  5.753  4.530
O 00 TP13                       P F8 NL-TP17
O 09 08:24:50                                                6.890  5.551  4.212
S 00 S15                        P G8
S 01 08:24:55 12/08/95  1.000
O 00 TP13                       P F8 NL-TP17
O 09 08:29:10                                                6.506  5.212  3.918
O 00 TP14                       P F8 NL-TP18
O 09 08:33:48                                                6.000  4.730  3.460
S 00 S16                        P G8
S 01 08:33:52 12/08/95  1.000
O 00 TP14                       P F8 NL-TP18
O 09 08:39:21                                                5.659  4.352  3.045
O 00 TP15                       P F8 NL-TP19
O 09 08:43:43                                                5.735  4.446  3.157
S 00 S17                        P G8
S 01 08:43:48 12/08/95  1.000
O 00 TP15                       P F8 NL-TP19
O 09 08:46:58                                                6.440  5.155  3.870
O 00 TP16                       P F8 NL-TP20
O 09 08:51:37                                                7.141  5.832  4.523
S 00 S18                        P G8
S 01 08:51:41 12/08/95  1.000
O 00 TP16                       P F8 NL-TP20
O 09 08:54:25                                                6.910  5.609  4.308
O 00 TP17                       P F8 NL-TP21
O 09 08:57:21                                                6.022  4.730  3.438
S 00 S19                        P G8
S 01 08:57:26 12/08/95  1.000
O 00 TP17                       P F8 NL-TP21
O 09 08:59:38                                                5.659  4.370  3.081
O 00 TP18                       P F8 NL-TP22
O 09 09:01:54                                                4.910  3.630  2.350
S 00 S20                        P G8
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S 01 09:01:59 12/08/95  1.000
O 00 TP18                      P F8 NL-TP22
O 09 09:06:26                                          7.486  5.890  4.294
O 00 C1                        P F8 NL-C3
O 09 09:08:22                                          6.968  6.455  5.942
O 00 TP19                      P F8 NL-TP23
O 09 09:12:33                                          9.560  8.070  6.580
S 00 S21                       P G8
S 01 09:12:59 12/08/95  1.000
O 00 TP19                      P F8 NL-TP23
O 09 09:17:04                                          7.391  6.027  4.663
O 00 TP20                      P F8 NL-TP24
O 09 09:19:40                                          7.249  5.938  4.627
S 00 S22                       P G8
S 01 09:19:44 12/08/95  1.000
O 00 TP20                      P F8 NL-TP24
O 09 09:22:10                                          7.474  6.131  4.788
O 00 TP21                      P F8 NL-TP25
O 09 09:25:29                                          6.735  5.442  4.149
S 00 S23                       P G8
S 01 09:25:35 12/08/95  1.000
O 00 TP21                      P F8 NL-TP25
O 09 09:28:53                                          3.920  2.853  1.786
O 00 TP22                      P F8 NL-TP26
O 09 09:32:41                                          6.527  5.273  4.019
S 00 S24                       P G8
S 01 09:32:48 12/08/95  1.000
O 00 TP22                      P F8 NL-TP26
O 09 09:35:23                                          6.387  5.102  3.817
O 00 TP23                      P F8 NL-TP27
O 09 09:40:10                                          5.940  4.646  3.352
S 00 S25                       P G8
S 01 09:40:16 12/08/95  1.000
O 00 TP23                      P F8 NL-TP27
O 09 09:42:57                                          6.012  4.699  3.386
O 00 TP24                      P F8 NL-TP28
O 09 09:45:57                                          6.183  4.862  3.541
S 00 S26                       P G8
S 01 09:46:03 12/08/95  1.000
O 00 TP24                      P F8 NL-TP28
O 09 09:49:15                                          5.989  4.683  3.377
O 00 TP25                      P F8 NL-TP29
O 09 09:52:22                                          5.873  4.664  3.455
S 00 S27                       P G8
S 01 09:52:26 12/08/95  1.000
O 00 TP25                      P F8 NL-TP29
O 09 09:55:24                                          5.822  4.517  3.212
O 00 TP26                      P F8 NL-TP30
O 09 09:59:24                                          5.848  4.557  3.266
S 00 S28                       P G8
S 01 09:59:28 12/08/95  1.000
O 00 TP26                      P F8 NL-TP30
O 09 10:03:54                                          6.150  4.854  3.558
O 00 TP27                      P F8 NL-TP31
O 09 10:08:07                                          6.458  4.977  3.496
S 00 S29                       P G8
S 01 10:08:13 12/08/95  1.000
O 00 TP27                      P F8 NL-TP31
O 09 10:12:27                                          6.472  5.135  3.798
O 00 TP28                      P F8 NL-TP32
O 09 10:16:23                                          6.048  4.748  3.448
S 00 S30                       P G8
S 01 10:16:28 12/08/95  1.000
O 00 TP28                      P F8 NL-TP32
O 09 10:19:25                                          6.316  4.939  3.562
O 00 TP29                      P F8 NL-TP33
O 09 10:27:50                                          6.641  5.454  4.267
S 00 S31                       P G8
S 01 10:27:54 12/08/95  1.000
O 00 TP29                      P F8 NL-TP33
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O 09 10:32:04                                                  6.234  4.857  3.480
O 00 TP30                        P F8 NL-TP34
O 09 10:36:46                                                  5.968  4.617  3.266
S 00 S32                         P G8
S 01 10:36:50 12/08/95  1.000
O 00 TP30                        P F8 NL-TP34
O 09 10:41:22                                                  7.402  6.135  4.868
O 00 TP31                        P F8 NL-TP35
O 09 10:45:38                                                  7.338  6.079  4.820
S 00 S33                         P G8
S 01 10:45:42 12/08/95  1.000
O 00 TP31                        P F8 NL-TP35
O 09 10:49:25                                                  5.805  4.560  3.315
O 00 TP32                        P F8 NL-TP36
O 09 10:53:47                                                  6.293  4.994  3.695
S 00 S34                         P G8
S 01 10:53:51 12/08/95  1.000
O 00 TP32                        P F8 NL-TP36
O 09 11:01:29                                                  6.415  5.124  3.833
O 00 TP33                        P F8 NL-TP37
O 09 11:05:14                                                  6.713  5.413  4.113
S 00 S35                         P G8
S 01 11:05:19 12/08/95  1.000
O 00 TP33                        P F8 NL-TP37
O 09 11:09:18                                                  6.386  5.109  3.832
O 00 TP34                        P F8 NL-TP38
O 09 11:15:23                                                  6.155  4.675  3.195
S 00 S36                         P G8
S 01 11:15:28 12/08/95  1.000
O 00 TP34                        P F8 NL-TP38
O 09 11:19:40                                                  5.713  4.695  3.677
O 00 TP35                        P F8 NL-TP39
O 09 11:24:12                                                  5.825  4.675  3.525
S 00 S37                         P G8
S 01 11:24:17 12/08/95  1.000
O 00 TP35                        P F8 NL-TP39
O 09 11:30:44                                                  5.797  4.802  3.807
O 00 TP36                        P F8 NL-TP40
O 09 11:37:31                                                  5.931  5.187  4.443
S 00 S38                         P G8
S 01 11:37:39 12/08/95  1.000
O 00 TP36                        P F8 NL-TP40
O 09 11:39:35                                                  5.552  5.227  4.902
O 00 6A1                         P F8 MONW
O 99 CONC.
O 09 11:58:13                                                  5.336  5.159  4.982
O 00 6A2                         P F8 MONW
O 99 TOP OF PIPE
O 09 11:58:58                                                  2.639  2.455  2.271
O 00 6A3                         P F8 MONW
O 99 TOP OF PVC
O 09 11:59:30                                                  3.032  2.848  2.664
O 00 6B1                         P F8 MONW
O 99 CONC.
O 09 12:00:23                                                  5.573  5.336  5.099
O 00 6B2                         P F8 MONW
O 99 TOP OF PIPE
O 09 12:00:55                                                  2.869  2.638  2.407
O 00 6B3                         P F8 MONW
O 99 TOP OF PVC
O 09 12:01:21                                                  3.222  2.990  2.758
O 00 TP37                        P F8 NL-TP41
O 09 12:04:03                                                  4.720  4.570  4.420
S 00 S39                         P G8
S 01 12:04:16 12/08/95  1.000
O 00 TP37                        P F8 NL-TP41
O 09 12:05:53                                                  4.670  4.520  4.370
O 00 TP38                        P F8 NL-TP50
O 09 12:06:57                                                  5.506  5.182  4.858
S 00 S40                         P G8
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S 01 12:07:03 12/08/95  1.000
O 00 TP38                      P F8 NL-TP50
O 09 12:32:24                                          5.855  5.112  4.369
O 00 TP39                      P F8 NL-TP51
O 09 12:38:02                                          5.735  4.737  3.739
S 00 S41                       P G8
S 01 12:38:07 12/08/95  1.000
O 00 TP39                      P F8 NL-TP51
O 09 12:42:11                                          5.901  4.749  3.597
O 00 TP40                      P F8 NL-TP52
O 09 12:45:24                                          5.786  4.771  3.756
S 00 S42                       P G8
S 01 12:45:29 12/08/95  1.000
O 00 TP40                      P F8 NL-TP52
O 09 12:51:13                                          5.937  4.461  2.985
O 00 TP41                      P F8 NL-TP53
O 09 12:54:56                                          6.185  4.904  3.623
S 00 S43                       P G8
S 01 12:54:59 12/08/95  1.000
O 00 TP41                      P F8 NL-TP53
O 09 13:01:40                                          6.789  5.487  4.185
O 00 TP42                      P F8 NL-TP54
O 09 13:06:06                                          6.460  5.170  3.880
S 00 S44                       P G8
S 01 13:06:11 12/08/95  1.000
O 00 TP42                      P F8 NL-TP54
O 09 13:10:33                                          6.237  4.937  3.637
O 00 TP43                      P F8 NL-TP55
O 09 13:13:56                                          5.734  4.488  3.242
S 00 S45                       P G8
S 01 13:14:02 12/08/95  1.000
O 00 TP43                      P F8 NL-TP55
O 09 13:18:18                                          7.048  5.776  4.504
O 00 TP44                      P F8 NL-TP56
O 09 13:21:50                                          7.108  5.853  4.598
S 00 S46                       P G8
S 01 13:21:56 12/08/95  1.000
O 00 TP44                      P F8 NL-TP56
O 09 13:26:08                                          5.958  4.606  3.254
O 00 TP45                      P F8 NL-TP57
O 09 13:29:36                                          6.220  4.845  3.470
S 00 S47                       P G8
S 01 13:29:42 12/08/95  1.000
O 00 TP45                      P F8 NL-TP57
O 09 13:33:33                                          6.647  5.462  4.277
O 00 TP46                      P F8 NL-TP58
O 09 13:37:44                                          6.328  4.950  3.572
S 00 S48                       P G8
S 01 13:37:48 12/08/95  1.000
O 00 TP46                      P F8 NL-TP58
O 09 13:42:14                                          5.976  4.672  3.368
O 00 TP47                      P F8 NL-TP59
O 09 13:48:16                                          6.392  5.061  3.730
S 00 S49                       P G8
S 01 13:48:21 12/08/95  1.000
O 00 TP47                      P F8 NL-TP59
O 09 13:53:29                                          6.333  4.850  3.367
O 00 TP48                      P F8 NL-TP60
O 09 13:57:18                                          6.035  4.741  3.447
S 00 S50                       P G8
S 01 13:57:22 12/08/95  1.000
O 00 TP48                      P F8 NL-TP60
O 09 14:01:25                                          5.755  4.463  3.171
O 00 TP49                      P F8 NL-TP61
O 09 14:04:53                                          5.716  4.412  3.108
S 00 S51                       P G8
S 01 14:04:56 12/08/95  1.000
O 00 TP49                      P F8 NL-TP61
O 09 14:08:36                                          5.924  4.711  3.498
O 00 TP50                      P F8 NL-TP62
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O 09 14:17:34                                                  6.063  4.759  3.455
S 00 S52                        P G8
S 01 14:17:37 12/08/95  1.000
O 00 TP50                       P F8 NL-TP62
O 09 14:21:43                                                  6.183  4.861  3.539
O 00 TP51                       P F8 NL-TP63
O 09 14:24:52                                                  5.996  4.684  3.372
S 00 S53                        P G8
S 01 14:24:56 12/08/95  1.000
O 00 TP51                       P F8 NL-TP63
O 09 14:29:21                                                  5.851  4.556  3.261
O 00 TP52                       P F8 NL-TP64
O 09 14:32:55                                                  6.296  5.011  3.726
S 00 S54                        P G8
S 01 14:33:00 12/08/95  1.000
O 00 TP52                       P F8 NL-TP64
O 09 14:36:51                                                  6.521  5.267  4.013
OD00 TP53                       P F8 NL-TP65
OD09 14:40:22                                                  3.917  2.851  1.785
S 00 S55                        P G8
S 01 14:40:26 12/08/95  1.000
OD00 TP53                       P F8 NL-TP65
OD09 14:44:04                                                  6.746  5.453  4.160
S 00 S55                        P G8
S 01 15:00:33 12/08/95  1.000
O 00 TP52                       P F8 NL-TP64
O 09 15:06:03                                                  6.857  5.604  4.351
O 00 TP53                       P F8 NL-TP65
O 09 15:09:57                                                  4.257  3.191  2.125
S 00 S56                        P G8
S 01 15:10:03 12/08/95  1.000
O 00 TP53                       P F8 NL-TP65
O 09 15:13:21                                                  6.678  5.382  4.086
O 00 TP54                       P F8 NL-TP66
O 09 15:16:13                                                  7.419  6.078  4.737
S 00 S57                        P G8
S 01 15:16:16 12/08/95  1.000
O 00 TP54                       P F8 NL-TP66
O 09 15:18:36                                                  7.059  5.748  4.437
O 00 TP55                       P F8 NL-TP67
O 09 15:21:04                                                  7.228  5.863  4.498
S 00 S58                        P G8
S 01 15:21:07 12/08/95  1.000
O 00 TP55                       P F8 NL-TP67
O 09 15:26:22                                                  8.866  7.373  5.880
O 00 TP56                       P F8 NL-TP68
O 09 15:35:35                                                  6.739  5.147  3.555
S 00 S59                        P G8
S 01 15:35:40 12/08/95  1.000
O 00 TP56                       P F8 NL-TP68
O 09 15:38:14                                                  4.671  3.378  2.085
O 00 TP57                       P F8 NL-TP69
O 09 15:40:12                                                  5.385  4.108  2.831
S 00 S60                        P G8
S 01 15:40:19 12/08/95  1.000
O 00 TP57                       P F8 NL-TP69
O 09 15:42:11                                                  5.724  4.430  3.136
O 00 TP58                       P F8 NL-TP70
O 09 15:44:29                                                  6.602  5.303  4.004
S 00 S61                        P G8
S 01 15:44:36 12/08/95  1.000
O 00 TP58                       P F8 NL-TP70
O 09 15:46:36                                                  7.024  5.719  4.414
O 00 TP59                       P F8 NL-TP71
O 09 15:47:58                                                  6.346  5.057  3.768
S 00 S62                        P G8
S 01 15:48:04 12/08/95  1.000
O 00 TP59                       P F8 NL-TP71
O 09 15:50:47                                                  5.470  4.180  2.890
O 00 TP60                       P F8 NL-TP72
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O 09 15:52:05                                                  5.402  4.096  2.790
S 00 S63                        P G8
S 01 15:52:09 12/08/95  1.000
O 00 TP60                       P F8 NL-TP72
O 09 15:54:06                                                  5.832  4.564  3.296
O 00 TP61                       P F8 NL-TP73
O 09 15:55:18                                                  6.337  5.042  3.747
S 00 S64                        P G8
S 01 15:55:22 12/08/95  1.000
O 00 TP61                       P F8 NL-TP73
O 09 15:57:41                                                  6.713  5.375  4.037
O 00 TP62                       P F8 NL-TP74
O 09 16:04:40                                                  6.804  5.582  4.360
S 00 S65                        P G8
S 01 16:04:44 12/08/95  1.000
O 00 TP62                       P F8 NL-TP74
O 09 16:06:27                                                  6.892  5.610  4.328
O 00 TP63                       P F8 NL-TP75
O 09 16:08:17                                                  6.038  4.815  3.592
S 00 S66                        P G8
S 01 16:08:21 12/08/95  1.000
O 00 TP63                       P F8 NL-TP75
O 09 16:11:22                                                  5.217  4.007  2.797
O 00 TP64                       P F8 NL-TP76
O 09 16:12:44                                                  5.306  4.165  3.024
S 00 S67                        P G8
S 01 16:12:48 12/08/95  1.000
O 00 TP64                       P F8 NL-TP76
O 09 16:15:29                                                  6.767  5.583  4.399
O 00 TP65                       P F8 NL-TP77
O 09 16:16:49                                                  6.645  5.482  4.319
S 00 S68                        P G8
S 01 16:16:53 12/08/95  1.000
O 00 TP65                       P F8 NL-TP77
O 09 16:19:06                                                  8.249  7.118  5.987
O 00 TP66                       P F8 NL-TP78
O 09 16:21:32                                                  8.880  7.656  6.432
S 00 S69                        P G8
S 01 16:21:37 12/08/95  1.000
O 00 TP66                       P F8 NL-TP78
O 09 16:25:58                                                  6.016  4.868  3.720
O 00 TP67                       P F8 NL-TP79
O 09 16:28:18                                                  5.673  4.478  3.283
S 00 S70                        P G8
S 01 16:28:22 12/08/95  1.000
O 00 TP67                       P F8 NL-TP79
O 09 16:30:57                                                  5.593  4.269  2.945
O 00 TP68                       P F8 NL-TP80
O 09 16:33:35                                                  5.717  4.358  2.999
S 00 S71                        P G8
S 01 16:33:41 12/08/95  1.000
O 00 TP68                       P F8 NL-TP80
O 09 16:36:32                                                  4.881  4.410  3.939
O 00 BM2       8-ES             P F8 STMD
O 09 16:37:57                                                  4.321  4.047  3.773
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
```

```
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S71,BM2,TP68,C1,6A3,6B3
Ï↕F2D    1¶“ñ┬Ï↕^”D €¤  ¤  x**→–┼          “Ò“¼└Ï↕^”D♬─D   ¦☼Dï┤j☼DDâ“×└Ï↕^”D
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
```

```
BMPALM.1D
MISCLOSURE OF MULTIPLE ELEV. DIFFERENCE MEASUREMENTS
   STATIONS           MISCLOSURE
 END OF MISCLOSURE REPORT

    78 OF   148 STATIONS IDENTIFIED AS VERTICAL SIDESHOTS
 BAND IS   2 STATIONS
 LEVEL NETWORK ADJUSTMENT

 NUMBER OF BENCHMARKS =     2
 NUMBER OF STATIONS =    70
 NUMBER OF MEASUREMENTS =    70
 NUMBER OF REQUIRED TERMS FOR NORMAL EQUATIONS =      208

 RESULTS OF ADJUSTMENT

 BENCHMARK ELEVATION RESIDUALS

   STATION       INPUT ELEV.     ADJUSTED ELEV.     ERROR EST.     RESIDUAL

   BM1               6.170             6.170         .000        .000  ( .0)
   BM2               4.940             4.940         .000        .000  ( .0)

 BENCHMARK RMS ERROR =       .000 SNOOP RMS =   .0
 MAX. BENCHMARK RESIDUAL AT STATION         BM1      OF       .000


 RESIDUALS

   FROM          TO            MEASURED      RESIDUAL      EST. ERROR

   BM1           TP1              .027          .002  ( .2)    .010
   TP1           TP2            -1.071          .002  ( .2)    .010
   TP2           TP3             -.195          .002  ( .2)    .010
   TP3           TP4              .020          .002  ( .2)    .010
   TP4           TP5             -.178          .002  ( .2)    .010
   TP5           BM2              .157          .002  ( .2)    .010
   BM2           TP6             -.358          .000  ( .0)    .010
   TP6           TP7              .082          .000  ( .0)    .010
   TP7           TP8             -.383          .000  ( .0)    .010
   TP8           TP9              .541          .000  ( .0)    .010
   TP9           TP10            -.105          .000  ( .0)    .010
   TP10          TP11             .161          .000  ( .0)    .010
   TP11          TP12            -.785          .000  ( .0)    .010
   TP12          TP13             .200          .000  ( .0)    .010
   TP13          TP14             .482          .000  ( .0)    .010
   TP14          TP15            -.094          .000  ( .0)    .010
   TP15          TP16            -.677          .000  ( .0)    .010
   TP16          TP17             .879          .000  ( .0)    .010
   TP17          TP18             .740          .000  ( .0)    .010
   TP18          TP19           -2.180          .000  ( .0)    .010
   TP19          TP20             .089          .000  ( .0)    .010
   TP20          TP21             .689          .000  ( .0)    .010
   TP21          TP22           -2.420          .000  ( .0)    .010
   TP22          TP23             .456          .000  ( .0)    .010
   TP23          TP24            -.163          .000  ( .0)    .010
   TP24          TP25             .019          .000  ( .0)    .010
   TP25          TP26            -.040          .000  ( .0)    .010
```

TP26	TP27	-.123	.000	(.0)	.010
TP27	TP28	.387	.000	(.0)	.010
TP28	TP29	-.515	.000	(.0)	.010
TP29	TP30	.240	.000	(.0)	.010
TP30	TP31	.056	.000	(.0)	.010
TP31	TP32	-.434	.000	(.0)	.010
TP32	TP33	-.289	.000	(.0)	.010
TP33	TP34	.434	.000	(.0)	.010
TP34	TP35	.020	.000	(.0)	.010
TP35	TP36	-.385	.000	(.0)	.010
TP36	TP37	.657	.000	(.0)	.010
TP37	TP38	-.662	.000	(.0)	.010
TP38	TP39	.375	.000	(.0)	.010
TP39	TP40	-.022	.000	(.0)	.010
TP40	TP41	-.443	.000	(.0)	.010
TP41	TP42	.317	.000	(.0)	.010
TP42	TP43	.449	.000	(.0)	.010
TP43	TP44	-.077	.000	(.0)	.010
TP44	TP45	-.239	.000	(.0)	.010
TP45	TP46	.512	.000	(.0)	.010
TP46	TP47	-.389	.000	(.0)	.010
TP47	TP48	.109	.000	(.0)	.010
TP48	TP49	.051	.000	(.0)	.010
TP49	TP50	-.048	.000	(.0)	.010
TP50	TP51	.177	.000	(.0)	.010
TP51	TP52	-.455	.000	(.0)	.010
TP52	TP53	2.413	.000	(.0)	.010
TP53	TP54	-.696	.000	(.0)	.010
TP54	TP55	-.115	.000	(.0)	.010
TP55	TP56	2.226	.000	(.0)	.010
TP56	TP57	-.730	.000	(.0)	.010
TP57	TP58	-.873	.000	(.0)	.010
TP58	TP59	.662	.000	(.0)	.010
TP59	TP60	.084	.000	(.0)	.010
TP60	TP61	-.478	.000	(.0)	.010
TP61	TP62	-.207	.000	(.0)	.010
TP62	TP63	.795	.000	(.0)	.010
TP63	TP64	-.158	.000	(.0)	.010
TP64	TP65	.101	.000	(.0)	.010
TP65	TP66	-.538	.000	(.0)	.010
TP66	TP67	.390	.000	(.0)	.010
TP67	TP68	-.089	.000	(.0)	.010
TP68	BM2	.363	.000	(.0)	.010

ELEV. DIFF. RMS ERROR = .001 SNOOP RMS = .1
MAX. ELEV. DIFF. RESIDUAL TP2 - TP3 OF .002

95% CONFIDENCE F STATISTIC STANDARD ERROR MULTIPLIER FOR 2 D.F. IS 6.16

STATION	ADJUSTED ELEV.	STANDARD ERROR
BM1	6.170	.000
TP1	6.199	.018
TP2	5.129	.022
TP3	4.936	.024
TP4	4.958	.022
TP5	4.781	.018
BM2	4.940	.000
TP6	4.582	.019
TP68	4.577	.019
TP7	4.664	.027
TP67	4.666	.027
TP8	4.281	.033
TP66	4.275	.033
TP9	4.823	.038
TP65	4.813	.038
TP10	4.718	.042
TP64	4.712	.042
TP11	4.879	.045

TP63	4.870	.045
TP12	4.094	.048
TP62	4.074	.048
TP13	4.294	.051
TP61	4.281	.051
TP14	4.777	.054
TP60	4.759	.054
TP15	4.683	.056
TP59	4.675	.056
TP16	4.006	.059
TP58	4.013	.059
TP17	4.885	.061
TP57	4.885	.061
TP18	5.626	.063
TP56	5.615	.063
TP19	3.446	.064
TP55	3.389	.064
TP20	3.535	.066
TP54	3.504	.066
TP21	4.224	.067
TP53	4.199	.067
TP22	1.804	.069
TP52	1.786	.069
TP23	2.261	.070
TP51	2.241	.070
TP24	2.098	.071
TP50	2.064	.071
TP25	2.117	.072
TP49	2.112	.072
TP26	2.077	.073
TP48	2.060	.073
TP27	1.955	.074
TP47	1.951	.074
TP28	2.342	.075
TP46	2.340	.075
TP29	1.827	.075
TP45	1.828	.075
TP30	2.067	.076
TP44	2.066	.076
TP31	2.123	.076
TP43	2.143	.076
TP32	1.690	.077
TP42	1.694	.077
TP33	1.401	.077
TP41	1.377	.077
TP34	1.835	.077
TP40	1.820	.077
TP35	1.855	.078
TP39	1.841	.078
TP36	1.471	.078
TP38	1.466	.078
TP37	2.128	.078

STANDARD ERROR OF UNIT WEIGHT IS .315
WITH 2 DEGREES OF FREEDOM

CHI SQUARED TEST ON ANALYSIS
.159 < .315 < 1.731
(LOW) (HIGH)
PASSES AT THE 5 % SIGNIFICANCE LEVEL

BMPALM.CHL
PROJECT NAME IS BMPALM

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 2805.700
CLOSURE IN ELEVATION (Z) = .010
CLOSURE PER STATION = .002
PRECISION = 1 / 280570.

STATION	ELEVATION (Z)
BM1	6.170
TP1	6.199
TP2	5.129
TP3	4.936
TP4	4.958
TP5	4.781
BM2	4.940

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 31003.500
CLOSURE IN ELEVATION (Z) = .014
CLOSURE PER STATION = .000
PRECISION = 1 / 2214536.

STATION	ELEVATION (Z)
BM2	4.940
TP6	4.582
TP7	4.664
TP8	4.281
TP9	4.823
TP10	4.718
TP11	4.879
TP12	4.094
TP13	4.294
TP14	4.777
TP15	4.683
TP16	4.006
TP17	4.885
TP18	5.626
TP19	3.446
TP20	3.535
TP21	4.224
TP22	1.804
TP23	2.261
TP24	2.098
TP25	2.117
TP26	2.077
TP27	1.955
TP28	2.342
TP29	1.827
TP30	2.067
TP31	2.123
TP32	1.690
TP33	1.401
TP34	1.835
TP35	1.855
TP36	1.471
TP37	2.128
TP38	1.466
TP39	1.841
TP40	1.820
TP41	1.377
TP42	1.694
TP43	2.143
TP44	2.066
TP45	1.828
TP46	2.340
TP47	1.951
TP48	2.060
TP49	2.112
TP50	2.064
TP51	2.241
TP52	1.786
TP53	4.199
TP54	3.504
TP55	3.389
TP56	5.615
TP57	4.885
TP58	4.013
TP59	4.675

```
        TP60                     4.759
        TP61                     4.281
        TP62                     4.074
        TP63                     4.870
        TP64                     4.712
        TP65                     4.813
        TP66                     4.275
        TP67                     4.666
        TP68                     4.577
        BM2                      4.940
```

```
 TOTAL LENGTH OF EVALUATED SURVEY DISTANCE =      6.403 MILES
 OVERALL PRECISION = 1 /     1408717.
```

```
BMPALM.CTL
G 00 BMPALM
G 01 BM1      V314                                             F88
G 02                              6.1700                   .0001
G 01 BM2      8ES                                              F88
G 02                              4.9400                   .0001
```

```
BMPALM.XYZ
G 00         BMPALM.XYZ
G 01 BM1      V314           P F8 STMD                         F88
G 02                              6.170                    .000
G 01 TP1                     P F8                              F88
G 02                              6.199                    .018
G 01 TP2                     P F8                              F88
G 02                              5.129                    .022
G 01 TP3                     P F8                              F88
G 02                              4.936                    .024
G 01 TP4                     P F8                              F88
G 02                              4.958                    .022
G 01 TP5                     P F8                              F88
G 02                              4.781                    .018
G 01 BM2      8-ES           P F8 STMD                         F88
G 02                              4.940                    .000
G 01 TP6                     P F8 NL-TP10                      F88
G 02                              4.582                    .019
G 01 TP7                     P F8 NL-TP11                      F88
G 02                              4.664                    .027
G 01 TP8                     P F8 NL-TP12                      F88
G 02                              4.281                    .033
G 01 TP9                     P F8 NL-TP13                      F88
G 02                              4.823                    .038
G 01 TP10                    P F8 NL-TP14                      F88
G 02                              4.718                    .042
G 01 TP11                    P F8 NL-TP15                      F88
G 02                              4.879                    .045
G 01 TP12                    P F8 NL-TP16                      F88
G 02                              4.094                    .048
G 01 TP13                    P F8 NL-TP17                      F88
G 02                              4.294                    .051
G 01 TP14                    P F8 NL-TP18                      F88
G 02                              4.777                    .054
G 01 TP15                    P F8 NL-TP19                      F88
G 02                              4.683                    .056
G 01 TP16                    P F8 NL-TP20                      F88
G 02                              4.006                    .059
G 01 TP17                    P F8 NL-TP21                      F88
G 02                              4.885                    .061
G 01 TP18                    P F8 NL-TP22                      F88
G 02                              5.626                    .063
G 01 C1                      P F8 NL-C3                        F88
G 02                              5.061
G 01 TP19                    P F8 NL-TP23                      F88
G 02                              3.446                    .064
```

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G 01 TP20                    P F8 NL-TP24                       F88
G 02                              3.535                    .066
G 01 TP21                    P F8 NL-TP25                       F88
G 02                              4.224                    .067
G 01 TP22                    P F8 NL-TP26                       F88
G 02                              1.804                    .069
G 01 TP23                    P F8 NL-TP27                       F88
G 02                              2.261                    .070
G 01 TP24                    P F8 NL-TP28                       F88
G 02                              2.098                    .071
G 01 TP25                    P F8 NL-TP29                       F88
G 02                              2.117                    .072
G 01 TP26                    P F8 NL-TP30                       F88
G 02                              2.077                    .073
G 01 TP27                    P F8 NL-TP31                       F88
G 02                              1.955                    .074
G 01 TP28                    P F8 NL-TP32                       F88
G 02                              2.342                    .075
G 01 TP29                    P F8 NL-TP33                       F88
G 02                              1.827                    .075
G 01 TP30                    P F8 NL-TP34                       F88
G 02                              2.067                    .076
G 01 TP31                    P F8 NL-TP35                       F88
G 02                              2.123                    .076
G 01 TP32                    P F8 NL-TP36                       F88
G 02                              1.690                    .077
G 01 TP33                    P F8 NL-TP37                       F88
G 02                              1.401                    .077
G 01 TP34                    P F8 NL-TP38                       F88
G 02                              1.835                    .077
G 01 TP35                    P F8 NL-TP39                       F88
G 02                              1.855                    .078
G 01 TP36                    P F8 NL-TP40                       F88
G 02                              1.471                    .078
G 01 6A1                     P F8 MONW                          F88
G 99 CONC.
G 02                              1.539
G 01 6A2                     P F8 MONW                          F88
G 99 TOP OF PIPE
G 02                              4.243
G 01 6A3                     P F8 MONW                          F88
G 99 TOP OF PVC
G 02                              3.850  6B
G 01 6B1                     P F8 MONW                          F88
G 99 CONC.
G 02                              1.362
G 01 6B2                     P F8 MONW                          F88
G 99 TOP OF PIPE
G 02                              4.060
G 01 6B3                     P F8 MONW                          F88
G 99 TOP OF PVC
G 02                              3.708  6A
G 01 TP37                    P F8 NL-TP41                       F88
G 02                              2.128                    .078
G 01 TP38                    P F8 NL-TP50                       F88
G 02                              1.466                    .078
G 01 TP39                    P F8 NL-TP51                       F88
G 02                              1.841                    .078
G 01 TP40                    P F8 NL-TP52                       F88
G 02                              1.820                    .077
G 01 TP41                    P F8 NL-TP53                       F88
G 02                              1.377                    .077
G 01 TP42                    P F8 NL-TP54                       F88
G 02                              1.694                    .077
G 01 TP43                    P F8 NL-TP55                       F88
G 02                              2.143                    .076
G 01 TP44                    P F8 NL-TP56                       F88
G 02                              2.066                    .076
G 01 TP45                    P F8 NL-TP57                       F88
G 02                              1.828                    .075
```

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G 01 TP46                P F8 NL-TP58                    F88
G 02                          2.340                  .075
G 01 TP47                P F8 NL-TP59                    F88
G 02                          1.951                  .074
G 01 TP48                P F8 NL-TP60                    F88
G 02                          2.060                  .073
G 01 TP49                P F8 NL-TP61                    F88
G 02                          2.112                  .072
G 01 TP50                P F8 NL-TP62                    F88
G 02                          2.064                  .071
G 01 TP51                P F8 NL-TP63                    F88
G 02                          2.241                  .070
G 01 TP52                P F8 NL-TP64                    F88
G 02                          1.786                  .069
G 01 TP53                P F8 NL-TP65                    F88
G 02                          4.199                  .067
G 01 TP54                P F8 NL-TP66                    F88
G 02                          3.504                  .066
G 01 TP55                P F8 NL-TP67                    F88
G 02                          3.389                  .064
G 01 TP56                P F8 NL-TP68                    F88
G 02                          5.615                  .063
G 01 TP57                P F8 NL-TP69                    F88
G 02                          4.885                  .061
G 01 TP58                P F8 NL-TP70                    F88
G 02                          4.013                  .059
G 01 TP59                P F8 NL-TP71                    F88
G 02                          4.675                  .056
G 01 TP60                P F8 NL-TP72                    F88
G 02                          4.759                  .054
G 01 TP61                P F8 NL-TP73                    F88
G 02                          4.281                  .051
G 01 TP62                P F8 NL-TP74                    F88
G 02                          4.074                  .048
G 01 TP63                P F8 NL-TP75                    F88
G 02                          4.870                  .045
G 01 TP64                P F8 NL-TP76                    F88
G 02                          4.712                  .042
G 01 TP65                P F8 NL-TP77                    F88
G 02                          4.813                  .038
G 01 TP66                P F8 NL-TP78                    F88
G 02                          4.275                  .033
G 01 TP67                P F8 NL-TP79                    F88
G 02                          4.666                  .027
G 01 TP68                P F8 NL-TP80                    F88
G 02                          4.577                  .019
```

```
BMPALM.OBS
H 00 BMPALM                  08:55:33 12/07/95  08:55:33 12/07/95 ENGLISH   2.55
C 00 08:59:24 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
C 13 09:14:15  4.44  4.54  4.82  4.72
S 00 S1                        P F8
S 01 09:16:58 12/07/95  1.000
C 00 09:50:39 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
C 00 09:50:58 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
S 00 S1                        P F8
S 01 09:51:41 12/07/95  1.000
C 00 09:52:53 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       T2000      90788            100
S 00 S1                        P F8
S 01 09:53:30 12/07/95  1.000
C 00 09:53:54 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       NA2000     90788            100
C 00 09:54:22 12/07/95  90 30.0 000001 CC  TC  GF
C 01 WILD       NA2000     90788            100
C 13 09:54:49  4.44  4.54  4.82  4.92
S 00 S1                        P F8
S 01 09:55:23 12/07/95  1.000
O 00 BM1       V314            P F8 STMD
O 09 09:57:13                                              3.757  3.406  3.055
O 00 TP1                       P F8
O 09 09:59:39                                              4.352  3.379  2.406
S 00 S2                        P F8
S 01 09:59:43 12/07/95  1.000
O 00 TP1                       P F8
O 09 10:13:30                                              5.355  4.013  2.671
O 00 TP2                       P F8
O 09 10:20:35                                              6.396  5.084  3.772
S 00 S3                        P F8
S 01 10:20:42 12/07/95  1.000
O 00 TP2                       P F8
O 09 10:23:41                                              6.037  4.708  3.379
O 00 TP3                       P F8
O 09 10:25:11                                              6.218  4.903  3.588
S 00 S4                        P F8
S 01 10:25:19 12/07/95  1.000
O 00 TP3                       P F8
O 09 10:27:54                                              6.586  5.257  3.928
O 00 TP4                       P F8
O 09 10:30:05                                              6.554  5.237  3.920
S 00 S5                        P F8
S 01 10:30:10 12/07/95  1.000
O 00 TP4                       P F8
O 09 10:36:11                                              5.885  4.546  3.207
O 00 TP5                       P F8
O 09 10:42:05                                              6.053  4.724  3.395
S 00 S6                        P F8
S 01 10:42:11 12/07/95  1.000
O 00 TP5                       P F8
O 09 10:45:28                                              5.484  4.219  2.954
O 00 BM2       8-ES            P F8 STMD
O 09 10:48:26                                              4.860  4.062  3.264
C 00 07:12:42 12/08/95  92 30.0 000001 CC  TC  GF
C 01 WILD       NA2000     90788            100
C 13 07:13:51  4.76  4.86  5.08  4.99
S 00 S7                        P G8
S 01 07:15:53 12/08/95  1.000
O 00 BM2       8-ES            P F8 STMD
O 09 07:26:42                                              4.454  4.176  3.898
O 00 TP6                       P F8 NL-TP10
O 09 07:27:51                                              5.005  4.534  4.063
S 00 S8                        P G8
S 01 07:27:55 12/08/95  1.000
O 00 TP6                       P F8 NL-TP10
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O 09 07:38:15                                                5.725  4.358  2.990
O 00 TP7                        P F8 NL-TP11
O 09 07:40:25                                                5.596  4.276  2.956
S 00 S9                         P G8
S 01 07:40:32 12/08/95  1.000
O 00 TP7                        P F8 NL-TP11
O 09 07:47:17                                                5.875  4.679  3.480
O 00 TP8                        P F8 NL-TP12
O 09 07:50:19                                                6.207  5.061  3.915
S 00 S10                        P G8
S 01 07:50:26 12/08/95  1.000
O 00 TP8                        P F8 NL-TP12
O 09 07:54:40                                                8.829  7.606  6.383
O 00 TP9                        P F8 NL-TP13
O 09 07:56:52                                                8.199  7.065  5.931
S 00 S11                        P G8
S 01 07:56:58 12/08/95  1.000
O 00 TP9                        P F8 NL-TP13
O 09 08:00:15                                                6.646  5.487  4.328
O 00 TP10                       P F8 NL-TP14
O 09 08:02:50                                                6.779  5.592  4.405
S 00 S12                        P G8
S 01 08:02:54 12/08/95  1.000
O 00 TP10                       P F8 NL-TP14
O 09 08:07:46                                                5.462  4.320  3.178
O 00 TP11                       P F8 NL-TP15
O 09 08:09:42                                                5.369  4.159  2.949
S 00 S13                        P G8
S 01 08:09:46 12/08/95  1.000
O 00 TP11                       P F8 NL-TP15
O 09 08:13:38                                                6.283  5.058  3.833
O 00 TP12                       P F8 NL-TP16
O 09 08:15:56                                                7.124  5.843  4.562
S 00 S14                        P G8
S 01 08:16:00 12/08/95  1.000
O 00 TP12                       P F8 NL-TP16
O 09 08:22:08                                                6.970  5.753  4.530
O 00 TP13                       P F8 NL-TP17
O 09 08:24:50                                                6.890  5.551  4.212
S 00 S15                        P G8
S 01 08:24:55 12/08/95  1.000
O 00 TP13                       P F8 NL-TP17
O 09 08:29:10                                                6.506  5.212  3.918
O 00 TP14                       P F8 NL-TP18
O 09 08:33:48                                                6.000  4.730  3.460
S 00 S16                        P G8
S 01 08:33:52 12/08/95  1.000
O 00 TP14                       P F8 NL-TP18
O 09 08:39:21                                                5.659  4.352  3.045
O 00 TP15                       P F8 NL-TP19
O 09 08:43:43                                                5.735  4.446  3.157
S 00 S17                        P G8
S 01 08:43:48 12/08/95  1.000
O 00 TP15                       P F8 NL-TP19
O 09 08:46:58                                                6.440  5.155  3.870
O 00 TP16                       P F8 NL-TP20
O 09 08:51:37                                                7.141  5.832  4.523
S 00 S18                        P G8
S 01 08:51:41 12/08/95  1.000
O 00 TP16                       P F8 NL-TP20
O 09 08:54:25                                                6.910  5.609  4.308
O 00 TP17                       P F8 NL-TP21
O 09 08:57:21                                                6.022  4.730  3.438
S 00 S19                        P G8
S 01 08:57:26 12/08/95  1.000
O 00 TP17                       P F8 NL-TP21
O 09 08:59:38                                                5.659  4.370  3.081
O 00 TP18                       P F8 NL-TP22
O 09 09:01:54                                                4.910  3.630  2.350
S 00 S20                        P G8
```

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S 01 09:01:59 12/08/95  1.000
O 00 TP18                      P F8 NL-TP22
O 09 09:06:26                                          7.486  5.890  4.294
O 00 C1                        P F8 NL-C3
O 09 09:08:22                                          6.968  6.455  5.942
O 00 TP19                      P F8 NL-TP23
O 09 09:12:33                                          9.560  8.070  6.580
S 00 S21                       P G8
S 01 09:12:59 12/08/95  1.000
O 00 TP19                      P F8 NL-TP23
O 09 09:17:04                                          7.391  6.027  4.663
O 00 TP20                      P F8 NL-TP24
O 09 09:19:40                                          7.249  5.938  4.627
S 00 S22                       P G8
S 01 09:19:44 12/08/95  1.000
O 00 TP20                      P F8 NL-TP24
O 09 09:22:10                                          7.474  6.131  4.788
O 00 TP21                      P F8 NL-TP25
O 09 09:25:29                                          6.735  5.442  4.149
S 00 S23                       P G8
S 01 09:25:35 12/08/95  1.000
O 00 TP21                      P F8 NL-TP25
O 09 09:28:53                                          3.920  2.853  1.786
O 00 TP22                      P F8 NL-TP26
O 09 09:32:41                                          6.527  5.273  4.019
S 00 S24                       P G8
S 01 09:32:48 12/08/95  1.000
O 00 TP22                      P F8 NL-TP26
O 09 09:35:23                                          6.387  5.102  3.817
O 00 TP23                      P F8 NL-TP27
O 09 09:40:10                                          5.940  4.646  3.352
S 00 S25                       P G8
S 01 09:40:16 12/08/95  1.000
O 00 TP23                      P F8 NL-TP27
O 09 09:42:57                                          6.012  4.699  3.386
O 00 TP24                      P F8 NL-TP28
O 09 09:45:57                                          6.183  4.862  3.541
S 00 S26                       P G8
S 01 09:46:03 12/08/95  1.000
O 00 TP24                      P F8 NL-TP28
O 09 09:49:15                                          5.989  4.683  3.377
O 00 TP25                      P F8 NL-TP29
O 09 09:52:22                                          5.873  4.664  3.455
S 00 S27                       P G8
S 01 09:52:26 12/08/95  1.000
O 00 TP25                      P F8 NL-TP29
O 09 09:55:24                                          5.822  4.517  3.212
O 00 TP26                      P F8 NL-TP30
O 09 09:59:24                                          5.848  4.557  3.266
S 00 S28                       P G8
S 01 09:59:28 12/08/95  1.000
O 00 TP26                      P F8 NL-TP30
O 09 10:03:54                                          6.150  4.854  3.558
O 00 TP27                      P F8 NL-TP31
O 09 10:08:07                                          6.458  4.977  3.496
S 00 S29                       P G8
S 01 10:08:13 12/08/95  1.000
O 00 TP27                      P F8 NL-TP31
O 09 10:12:27                                          6.472  5.135  3.798
O 00 TP28                      P F8 NL-TP32
O 09 10:16:23                                          6.048  4.748  3.448
S 00 S30                       P G8
S 01 10:16:28 12/08/95  1.000
O 00 TP28                      P F8 NL-TP32
O 09 10:19:25                                          6.316  4.939  3.562
O 00 TP29                      P F8 NL-TP33
O 09 10:27:50                                          6.641  5.454  4.267
S 00 S31                       P G8
S 01 10:27:54 12/08/95  1.000
O 00 TP29                      P F8 NL-TP33
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O 09 10:32:04                                                  6.234  4.857  3.480
O 00 TP30                       P F8 NL-TP34
O 09 10:36:46                                                  5.968  4.617  3.266
S 00 S32                        P G8
S 01 10:36:50 12/08/95  1.000
O 00 TP30                       P F8 NL-TP34
O 09 10:41:22                                                  7.402  6.135  4.868
O 00 TP31                       P F8 NL-TP35
O 09 10:45:38                                                  7.338  6.079  4.820
S 00 S33                        P G8
S 01 10:45:42 12/08/95  1.000
O 00 TP31                       P F8 NL-TP35
O 09 10:49:25                                                  5.805  4.560  3.315
O 00 TP32                       P F8 NL-TP36
O 09 10:53:47                                                  6.293  4.994  3.695
S 00 S34                        P G8
S 01 10:53:51 12/08/95  1.000
O 00 TP32                       P F8 NL-TP36
O 09 11:01:29                                                  6.415  5.124  3.833
O 00 TP33                       P F8 NL-TP37
O 09 11:05:14                                                  6.713  5.413  4.113
S 00 S35                        P G8
S 01 11:05:19 12/08/95  1.000
O 00 TP33                       P F8 NL-TP37
O 09 11:09:18                                                  6.386  5.109  3.832
O 00 TP34                       P F8 NL-TP38
O 09 11:15:23                                                  6.155  4.675  3.195
S 00 S36                        P G8
S 01 11:15:28 12/08/95  1.000
O 00 TP34                       P F8 NL-TP38
O 09 11:19:40                                                  5.713  4.695  3.677
O 00 TP35                       P F8 NL-TP39
O 09 11:24:12                                                  5.825  4.675  3.525
S 00 S37                        P G8
S 01 11:24:17 12/08/95  1.000
O 00 TP35                       P F8 NL-TP39
O 09 11:30:44                                                  5.797  4.802  3.807
O 00 TP36                       P F8 NL-TP40
O 09 11:37:31                                                  5.931  5.187  4.443
S 00 S38                        P G8
S 01 11:37:39 12/08/95  1.000
O 00 TP36                       P F8 NL-TP40
O 09 11:39:35                                                  5.552  5.227  4.902
O 00 6A1                        P F8 MONW
O 99 CONC.
O 09 11:58:13                                                  5.336  5.159  4.982
O 00 6A2                        P F8 MONW
O 99 TOP OF PIPE
O 09 11:58:58                                                  2.639  2.455  2.271
O 00 6A3                        P F8 MONW
O 99 TOP OF PVC
O 09 11:59:30                                                  3.032  2.848  2.664
O 00 6B1                        P F8 MONW
O 99 CONC.
O 09 12:00:23                                                  5.573  5.336  5.099
O 00 6B2                        P F8 MONW
O 99 TOP OF PIPE
O 09 12:00:55                                                  2.869  2.638  2.407
O 00 6B3                        P F8 MONW
O 99 TOP OF PVC
O 09 12:01:21                                                  3.222  2.990  2.758
O 00 TP37                       P F8 NL-TP41
O 09 12:04:03                                                  4.720  4.570  4.420
S 00 S39                        P G8
S 01 12:04:16 12/08/95  1.000
O 00 TP37                       P F8 NL-TP41
O 09 12:05:53                                                  4.670  4.520  4.370
O 00 TP38                       P F8 NL-TP50
O 09 12:06:57                                                  5.506  5.182  4.858
S 00 S40                        P G8
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S 01 12:07:03 12/08/95  1.000
O 00 TP38                       P F8 NL-TP50
O 09 12:32:24                                                5.855  5.112  4.369
O 00 TP39                       P F8 NL-TP51
O 09 12:38:02                                                5.735  4.737  3.739
S 00 S41                        P G8
S 01 12:38:07 12/08/95  1.000
O 00 TP39                       P F8 NL-TP51
O 09 12:42:11                                                5.901  4.749  3.597
O 00 TP40                       P F8 NL-TP52
O 09 12:45:24                                                5.786  4.771  3.756
S 00 S42                        P G8
S 01 12:45:29 12/08/95  1.000
O 00 TP40                       P F8 NL-TP52
O 09 12:51:13                                                5.937  4.461  2.985
O 00 TP41                       P F8 NL-TP53
O 09 12:54:56                                                6.185  4.904  3.623
S 00 S43                        P G8
S 01 12:54:59 12/08/95  1.000
O 00 TP41                       P F8 NL-TP53
O 09 13:01:40                                                6.789  5.487  4.185
O 00 TP42                       P F8 NL-TP54
O 09 13:06:06                                                6.460  5.170  3.880
S 00 S44                        P G8
S 01 13:06:11 12/08/95  1.000
O 00 TP42                       P F8 NL-TP54
O 09 13:10:33                                                6.237  4.937  3.637
O 00 TP43                       P F8 NL-TP55
O 09 13:13:56                                                5.734  4.488  3.242
S 00 S45                        P G8
S 01 13:14:02 12/08/95  1.000
O 00 TP43                       P F8 NL-TP55
O 09 13:18:18                                                7.048  5.776  4.504
O 00 TP44                       P F8 NL-TP56
O 09 13:21:50                                                7.108  5.853  4.598
S 00 S46                        P G8
S 01 13:21:56 12/08/95  1.000
O 00 TP44                       P F8 NL-TP56
O 09 13:26:08                                                5.958  4.606  3.254
O 00 TP45                       P F8 NL-TP57
O 09 13:29:36                                                6.220  4.845  3.470
S 00 S47                        P G8
S 01 13:29:42 12/08/95  1.000
O 00 TP45                       P F8 NL-TP57
O 09 13:33:33                                                6.647  5.462  4.277
O 00 TP46                       P F8 NL-TP58
O 09 13:37:44                                                6.328  4.950  3.572
S 00 S48                        P G8
S 01 13:37:48 12/08/95  1.000
O 00 TP46                       P F8 NL-TP58
O 09 13:42:14                                                5.976  4.672  3.368
O 00 TP47                       P F8 NL-TP59
O 09 13:48:16                                                6.392  5.061  3.730
S 00 S49                        P G8
S 01 13:48:21 12/08/95  1.000
O 00 TP47                       P F8 NL-TP59
O 09 13:53:29                                                6.333  4.850  3.367
O 00 TP48                       P F8 NL-TP60
O 09 13:57:18                                                6.035  4.741  3.447
S 00 S50                        P G8
S 01 13:57:22 12/08/95  1.000
O 00 TP48                       P F8 NL-TP60
O 09 14:01:25                                                5.755  4.463  3.171
O 00 TP49                       P F8 NL-TP61
O 09 14:04:53                                                5.716  4.412  3.108
S 00 S51                        P G8
S 01 14:04:56 12/08/95  1.000
O 00 TP49                       P F8 NL-TP61
O 09 14:08:36                                                5.924  4.711  3.498
O 00 TP50                       P F8 NL-TP62
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O 09 14:17:34                                                  6.063  4.759  3.455
S 00 S52                        P G8
S 01 14:17:37 12/08/95  1.000
O 00 TP50                       P F8 NL-TP62
O 09 14:21:43                                                  6.183  4.861  3.539
O 00 TP51                       P F8 NL-TP63
O 09 14:24:52                                                  5.996  4.684  3.372
S 00 S53                        P G8
S 01 14:24:56 12/08/95  1.000
O 00 TP51                       P F8 NL-TP63
O 09 14:29:21                                                  5.851  4.556  3.261
O 00 TP52                       P F8 NL-TP64
O 09 14:32:55                                                  6.296  5.011  3.726
S 00 S54                        P G8
S 01 14:33:00 12/08/95  1.000
O 00 TP52                       P F8 NL-TP64
O 09 14:36:51                                                  6.521  5.267  4.013
OD00 TP53                       P F8 NL-TP65
OD09 14:40:22                                                  3.917  2.851  1.785
S 00 S55                        P G8
S 01 14:40:26 12/08/95  1.000
OD00 TP53                       P F8 NL-TP65
OD09 14:44:04                                                  6.746  5.453  4.160
S 00 S55                        P G8
S 01 15:00:33 12/08/95  1.000
O 00 TP52                       P F8 NL-TP64
O 09 15:06:03                                                  6.857  5.604  4.351
O 00 TP53                       P F8 NL-TP65
O 09 15:09:57                                                  4.257  3.191  2.125
S 00 S56                        P G8
S 01 15:10:03 12/08/95  1.000
O 00 TP53                       P F8 NL-TP65
O 09 15:13:21                                                  6.678  5.382  4.086
O 00 TP54                       P F8 NL-TP66
O 09 15:16:13                                                  7.419  6.078  4.737
S 00 S57                        P G8
S 01 15:16:16 12/08/95  1.000
O 00 TP54                       P F8 NL-TP66
O 09 15:18:36                                                  7.059  5.748  4.437
O 00 TP55                       P F8 NL-TP67
O 09 15:21:04                                                  7.228  5.863  4.498
S 00 S58                        P G8
S 01 15:21:07 12/08/95  1.000
O 00 TP55                       P F8 NL-TP67
O 09 15:26:22                                                  8.866  7.373  5.880
O 00 TP56                       P F8 NL-TP68
O 09 15:35:35                                                  6.739  5.147  3.555
S 00 S59                        P G8
S 01 15:35:40 12/08/95  1.000
O 00 TP56                       P F8 NL-TP68
O 09 15:38:14                                                  4.671  3.378  2.085
O 00 TP57                       P F8 NL-TP69
O 09 15:40:12                                                  5.385  4.108  2.831
S 00 S60                        P G8
S 01 15:40:19 12/08/95  1.000
O 00 TP57                       P F8 NL-TP69
O 09 15:42:11                                                  5.724  4.430  3.136
O 00 TP58                       P F8 NL-TP70
O 09 15:44:29                                                  6.602  5.303  4.004
S 00 S61                        P G8
S 01 15:44:36 12/08/95  1.000
O 00 TP58                       P F8 NL-TP70
O 09 15:46:36                                                  7.024  5.719  4.414
O 00 TP59                       P F8 NL-TP71
O 09 15:47:58                                                  6.346  5.057  3.768
S 00 S62                        P G8
S 01 15:48:04 12/08/95  1.000
O 00 TP59                       P F8 NL-TP71
O 09 15:50:47                                                  5.470  4.180  2.890
O 00 TP60                       P F8 NL-TP72
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O 09 15:52:05                                                5.402  4.096  2.790
S 00 S63                        P G8
S 01 15:52:09 12/08/95  1.000
O 00 TP60                       P F8 NL-TP72
O 09 15:54:06                                                5.832  4.564  3.296
O 00 TP61                       P F8 NL-TP73
O 09 15:55:18                                                6.337  5.042  3.747
S 00 S64                        P G8
S 01 15:55:22 12/08/95  1.000
O 00 TP61                       P F8 NL-TP73
O 09 15:57:41                                                6.713  5.375  4.037
O 00 TP62                       P F8 NL-TP74
O 09 16:04:40                                                6.804  5.582  4.360
S 00 S65                        P G8
S 01 16:04:44 12/08/95  1.000
O 00 TP62                       P F8 NL-TP74
O 09 16:06:27                                                6.892  5.610  4.328
O 00 TP63                       P F8 NL-TP75
O 09 16:08:17                                                6.038  4.815  3.592
S 00 S66                        P G8
S 01 16:08:21 12/08/95  1.000
O 00 TP63                       P F8 NL-TP75
O 09 16:11:22                                                5.217  4.007  2.797
O 00 TP64                       P F8 NL-TP76
O 09 16:12:44                                                5.306  4.165  3.024
S 00 S67                        P G8
S 01 16:12:48 12/08/95  1.000
O 00 TP64                       P F8 NL-TP76
O 09 16:15:29                                                6.767  5.583  4.399
O 00 TP65                       P F8 NL-TP77
O 09 16:16:49                                                6.645  5.482  4.319
S 00 S68                        P G8
S 01 16:16:53 12/08/95  1.000
O 00 TP65                       P F8 NL-TP77
O 09 16:19:06                                                8.249  7.118  5.987
O 00 TP66                       P F8 NL-TP78
O 09 16:21:32                                                8.880  7.656  6.432
S 00 S69                        P G8
S 01 16:21:37 12/08/95  1.000
O 00 TP66                       P F8 NL-TP78
O 09 16:25:58                                                6.016  4.868  3.720
O 00 TP67                       P F8 NL-TP79
O 09 16:28:18                                                5.673  4.478  3.283
S 00 S70                        P G8
S 01 16:28:22 12/08/95  1.000
O 00 TP67                       P F8 NL-TP79
O 09 16:30:57                                                5.593  4.269  2.945
O 00 TP68                       P F8 NL-TP80
O 09 16:33:35                                                5.717  4.358  2.999
S 00 S71                        P G8
S 01 16:33:41 12/08/95  1.000
O 00 TP68                       P F8 NL-TP80
O 09 16:36:32                                                4.881  4.410  3.939
O 00 BM2      8-ES              P F8 STMD
O 09 16:37:57                                                4.321  4.047  3.773
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA STARTS HERE
C 00 00:00:00 12/31/99
C 99 DUMMY TAPE CALIBRATION TO RE-INITIALIZE COLLIMATION TO ZERO
C 01 TAPING     TAPING                10 99 100
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      D   0  0  0.0  90  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
C 03 00:00:00                      R 180  0  0.0 270  0  0.0
R 00 00:00:00 12/31/99
R 99 TAPE OBSERVATION DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) START HERE
R 00 00:00:00 12/31/99
R 99 TAPE TRAVERSE DATA (I.E. CHAINS) ENDS HERE
```

```
R 00 00:00:00 12/31/99
R 99 CHAIN DATA STARTS HERE
R 00 00:00:00 12/31/99
R 99 CHAIN DATA ENDS HERE
R 00 00:00:00 12/31/99
R 99 PREFIX DATA STARTS HERE
P 00
P 01 S71,BM2,TP68,C1,6A3,6B3
Ï↕F2D    1¶“ñ┬Ï↕^”D €¤  ¤  x**→–┼          “Ò“¼└Ï↕^”D♬─D   ¦☼Dï┤j☼DDâ“×└Ï↕^”D
R 00 00:00:00 12/31/99
R 99 PREFIX DATA ENDS HERE
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BMPALM.CHL
PROJECT NAME IS BMPALM

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 2805.700
CLOSURE IN ELEVATION (Z) = .010
CLOSURE PER STATION = .002
PRECISION = 1 / 280570.

STATION	ELEVATION (Z)
BM1	6.170
TP1	6.199
TP2	5.129
TP3	4.936
TP4	4.958
TP5	4.781
BM2	4.940

ELEVATION CLOSURE REPORT
SUM OF DISTANCES ALONG SURVEY IS 31003.500
CLOSURE IN ELEVATION (Z) = .014
CLOSURE PER STATION = .000
PRECISION = 1 / 2214536.

STATION	ELEVATION (Z)
BM2	4.940
TP6	4.582
TP7	4.664
TP8	4.281
TP9	4.823
TP10	4.718
TP11	4.879
TP12	4.094
TP13	4.294
TP14	4.777
TP15	4.683
TP16	4.006
TP17	4.885
TP18	5.626
TP19	3.446
TP20	3.535
TP21	4.224
TP22	1.804
TP23	2.261
TP24	2.098
TP25	2.117
TP26	2.077
TP27	1.955
TP28	2.342
TP29	1.827
TP30	2.067
TP31	2.123
TP32	1.690
TP33	1.401
TP34	1.835
TP35	1.855
TP36	1.471
TP37	2.128
TP38	1.466
TP39	1.841

TP40	1.820
TP41	1.377
TP42	1.694
TP43	2.143
TP44	2.066
TP45	1.828
TP46	2.340
TP47	1.951
TP48	2.060
TP49	2.112
TP50	2.064
TP51	2.241
TP52	1.786
TP53	4.199
TP54	3.504
TP55	3.389
TP56	5.615
TP57	4.885
TP58	4.013
TP59	4.675
TP60	4.759
TP61	4.281
TP62	4.074
TP63	4.870
TP64	4.712
TP65	4.813
TP66	4.275
TP67	4.666
TP68	4.577
BM2	4.940

TOTAL LENGTH OF EVALUATED SURVEY DISTANCE = 6.403 MILES
OVERALL PRECISION = 1 / 1408717.

```
BMPALM. CTL
G 00 BMPALM
G 01 BM1      V314                                          F88
G 02                                7.7000                .0001
G 01 BM2      8ES                                           F88
G 02                                6.4700                .0001
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BMPALM.XYZ
G 00         BMPALM.XYZ
G 01 BM1      V314             P F8 STMD                    F88
G 02                                7.700                 .000
G 01 TP1                       P F8                         F88
G 02                                7.729                 .018
G 01 TP2                       P F8                         F88
G 02                                6.659                 .022
G 01 TP3                       P F8                         F88
G 02                                6.466                 .024
G 01 TP4                       P F8                         F88
G 02                                6.488                 .022
G 01 TP5                       P F8                         F88
G 02                                6.311                 .018
G 01 BM2      8-ES             P F8 STMD                    F88
G 02                                6.470                 .000
G 01 TP6                       P F8 NL-TP10                 F88
G 02                                6.112                 .019
G 01 TP7                       P F8 NL-TP11                 F88
G 02                                6.194                 .027
G 01 TP8                       P F8 NL-TP12                 F88
G 02                                5.811                 .033
G 01 TP9                       P F8 NL-TP13                 F88
G 02                                6.353                 .038
G 01 TP10                      P F8 NL-TP14                 F88
G 02                                6.248                 .042
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G 01 TP11                    P F8 NL-TP15                    F88
G 02                              6.409                  .045
G 01 TP12                    P F8 NL-TP16                    F88
G 02                              5.624                  .048
G 01 TP13                    P F8 NL-TP17                    F88
G 02                              5.824                  .051
G 01 TP14                    P F8 NL-TP18                    F88
G 02                              6.307                  .054
G 01 TP15                    P F8 NL-TP19                    F88
G 02                              6.213                  .056
G 01 TP16                    P F8 NL-TP20                    F88
G 02                              5.536                  .059
G 01 TP17                    P F8 NL-TP21                    F88
G 02                              6.415                  .061
G 01 TP18                    P F8 NL-TP22                    F88
G 02                              7.156                  .063
G 01 C1                      P F8 NL-C3                      F88
G 02                              6.591
G 01 TP19                    P F8 NL-TP23                    F88
G 02                              4.976                  .064
G 01 TP20                    P F8 NL-TP24                    F88
G 02                              5.065                  .066
G 01 TP21                    P F8 NL-TP25                    F88
G 02                              5.754                  .067
G 01 TP22                    P F8 NL-TP26                    F88
G 02                              3.334                  .069
G 01 TP23                    P F8 NL-TP27                    F88
G 02                              3.791                  .070
G 01 TP24                    P F8 NL-TP28                    F88
G 02                              3.628                  .071
G 01 TP25                    P F8 NL-TP29                    F88
G 02                              3.647                  .072
G 01 TP26                    P F8 NL-TP30                    F88
G 02                              3.607                  .073
G 01 TP27                    P F8 NL-TP31                    F88
G 02                              3.485                  .074
G 01 TP28                    P F8 NL-TP32                    F88
G 02                              3.872                  .075
G 01 TP29                    P F8 NL-TP33                    F88
G 02                              3.357                  .075
G 01 TP30                    P F8 NL-TP34                    F88
G 02                              3.597                  .076
G 01 TP31                    P F8 NL-TP35                    F88
G 02                              3.653                  .076
G 01 TP32                    P F8 NL-TP36                    F88
G 02                              3.220                  .077
G 01 TP33                    P F8 NL-TP37                    F88
G 02                              2.931                  .077
G 01 TP34                    P F8 NL-TP38                    F88
G 02                              3.365                  .077
G 01 TP35                    P F8 NL-TP39                    F88
G 02                              3.385                  .078
G 01 TP36                    P F8 NL-TP40                    F88
G 02                              3.001                  .078
G 01 6A1                     P F8 MONW                       F88
G 99 CONC.
G 02                              3.069
G 01 6A2                     P F8 MONW                       F88
G 99 TOP OF PIPE
G 02                              5.773
G 01 6A3                     P F8 MONW                       F88
G 99 TOP OF PVC
G 02                              5.380 6B
G 01 6B1                     P F8 MONW                       F88
G 99 CONC.
G 02                              2.892
G 01 6B2                     P F8 MONW                       F88
G 99 TOP OF PIPE
G 02                              5.590
G 01 6B3                     P F8 MONW                       F88
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G 99 TOP OF PVC
G 02                              5.238   6A
G 01 TP37                    P F8 NL-TP41                         F88
G 02                              3.658                      .078
G 01 TP38                    P F8 NL-TP50                         F88
G 02                              2.996                      .078
G 01 TP39                    P F8 NL-TP51                         F88
G 02                              3.371                      .078
G 01 TP40                    P F8 NL-TP52                         F88
G 02                              3.350                      .077
G 01 TP41                    P F8 NL-TP53                         F88
G 02                              2.907                      .077
G 01 TP42                    P F8 NL-TP54                         F88
G 02                              3.224                      .077
G 01 TP43                    P F8 NL-TP55                         F88
G 02                              3.673                      .076
G 01 TP44                    P F8 NL-TP56                         F88
G 02                              3.596                      .076
G 01 TP45                    P F8 NL-TP57                         F88
G 02                              3.358                      .075
G 01 TP46                    P F8 NL-TP58                         F88
G 02                              3.870                      .075
G 01 TP47                    P F8 NL-TP59                         F88
G 02                              3.481                      .074
G 01 TP48                    P F8 NL-TP60                         F88
G 02                              3.590                      .073
G 01 TP49                    P F8 NL-TP61                         F88
G 02                              3.642                      .072
G 01 TP50                    P F8 NL-TP62                         F88
G 02                              3.594                      .071
G 01 TP51                    P F8 NL-TP63                         F88
G 02                              3.771                      .070
G 01 TP52                    P F8 NL-TP64                         F88
G 02                              3.316                      .069
G 01 TP53                    P F8 NL-TP65                         F88
G 02                              5.729                      .067
G 01 TP54                    P F8 NL-TP66                         F88
G 02                              5.034                      .066
G 01 TP55                    P F8 NL-TP67                         F88
G 02                              4.919                      .064
G 01 TP56                    P F8 NL-TP68                         F88
G 02                              7.145                      .063
G 01 TP57                    P F8 NL-TP69                         F88
G 02                              6.415                      .061
G 01 TP58                    P F8 NL-TP70                         F88
G 02                              5.543                      .059
G 01 TP59                    P F8 NL-TP71                         F88
G 02                              6.205                      .056
G 01 TP60                    P F8 NL-TP72                         F88
G 02                              6.289                      .054
G 01 TP61                    P F8 NL-TP73                         F88
G 02                              5.811                      .051
G 01 TP62                    P F8 NL-TP74                         F88
G 02                              5.604                      .048
G 01 TP63                    P F8 NL-TP75                         F88
G 02                              6.400                      .045
G 01 TP64                    P F8 NL-TP76                         F88
G 02                              6.242                      .042
G 01 TP65                    P F8 NL-TP77                         F88
G 02                              6.343                      .038
G 01 TP66                    P F8 NL-TP78                         F88
G 02                              5.805                      .033
G 01 TP67                    P F8 NL-TP79                         F88
G 02                              6.196                      .027
G 01 TP68                    P F8 NL-TP80                         F88
G 02                              6.107                      .019
```

Fixed width point lat/long/height listing

Project : 1834

User name	mmckay	**Date & Time**	2:15:32 PM 7/22/2005
Coordinate System	US State Plane 1983	**Zone**	Florida East 0901
Project Datum	NAD 1983 (Conus)		
Vertical Datum	NAVD-88	**Geoid Model**	GEOID03-Florida
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

Point listing

Name	Latitude	Longitude	Height	Feature Code
H098	25°28'56.73273"N	80°22'17.84087"W	-69.757	BASE
1000	25°29'22.36525"N	80°20'48.99131"W	-66.204	r724
w2	25°30'07.00000"N	80°21'51.00000"W	0.000	WELL
w10	25°28'20.00000"N	80°19'54.00000"W	0.000	WELL
6117	25°28'19.75687"N	80°19'55.57794"W	-65.253	WELL
6118	25°28'19.67518"N	80°19'55.60331"W	-75.893	WELL
6119	25°28'19.69025"N	80°19'55.61148"W	-65.076	WELL
w9	25°28'21.14728"N	80°20'48.74987"W	-68.589	WELL
w9a	25°28'21.22967"N	80°20'48.74849"W	-68.554	WELL
w3a	25°29'06.90638"N	80°22'46.49994"W	-68.219	WELL
w3b	25°29'06.90599"N	80°22'46.54356"W	-68.165	WELL
w22	25°30'15.01587"N	80°20'51.36032"W	-67.993	WELL
w4	25°27'20.46866"N	80°22'02.66956"W	-70.447	
w5	25°26'26.67790"N	80°22'46.66145"W	-68.651	WELL
TEST	25°48'09.81220"N	80°21'55.06944"W	-78.161	
6352	25°48'09.82674"N	80°21'55.17527"W	-77.249	WELL
6353	25°48'09.75764"N	80°21'55.23181"W	-77.364	WELL
TRAV4	25°37'22.39803"N	80°18'39.43883"W	-79.056	BASE
6354	25°37'25.56377"N	80°18'39.31953"W	-72.830	NL
6355	25°36'05.41229"N	80°18'34.23553"W	-78.508	WELL
6356	25°36'05.47579"N	80°18'34.17560"W	-78.517	WELL
6	25°25'18.00000"N	80°26'01.00000"W	10.000	WELL
AUTO0001	25°40'35.06356"N	80°19'23.67748"W	-82.523	W1

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