



Data Sheet and Surveyor's Report for Buck Island Ranch Monitoring Well Benchmarks

Description: **Monitoring Well "BUCK 05"**
Location: Buck Island Ranch, Highlands County, Florida

Date: June 17, 2005

Project Result

Benchmarks established:

1. **"BUCK 05B"**: Top of existing 1.5" steel pipe
 - a. Elevation: **8.3129 m**
2. **"BUCK 05C"**: Top of existing 3" PVC monitoring well casing
 - a. Elevation: **9.1727 m**

Party Chief: **G. Royer**

Field Book: **154**, Pages **1 - 45**

Survey Date: **February – May 2005**

Bench Mark: **"H-437"** El. **9.395 m / 30.82 ft.**
"J-437" El. **11.555 m / 37.91 ft.**

Vertical Datum: **NAVD1988**

NGVD 1929 Offset: + **1.210 ft.** (add this value to convert to NGVD 1929)

Comments:

The offset value referred to as "NGVD 1929 Offset" was derived by subtracting the published NAVD 1988 elevation from the published NGVD 1929 elevation for NGS Benchmarks "H-437 and J-437".

G.P.S. POSITION (NAD 83, Florida East Zone, Sub-meter):

Well Site: **"BUCK 05C"** N = **1017238** E = **588575**

NAVD 88 - North American Vertical Datum of 1988

NGVD29 -National Geodetic Vertical Datum of 1929

NAD 83 (Horizontal Datum) North American Datum of 1983

*Note: See the SFWMD Benchmark Description Sheet for additional information

SURVEYOR'S REPORT

Vertical Control Survey

Hyatt Survey Services, Inc. operating under sub-contract to George F Young, Inc. and the South Florida Water Management District was tasked with the execution of a Vertical Control Survey in support of the District's Benchmark Densification and Monitoring Well Elevation Initiatives.

Purpose

The purpose of this survey was to establish benchmarks at each of 22 monitoring wells on the Buck Island Ranch Facility in Highlands County, Florida. A minimum of two (2) benchmarks were established at each well.

1. **"A"** benchmarks are NGS Class "C", "poured-in-place," concrete monuments with SFWMD bronze disks set flush with the ground.

2. “B” benchmarks were set on the top of existing 1.5” steel pipes at each well site. Each pipe protrudes approximately 3” above the surrounding ground.
3. “C” benchmarks were set on the top of the 3” PVC well casing at each well site.

Elevations were determined by digital differential leveling performed in accordance with the Minimum Technical Standards (MTS) for Vertical Control Surveys as set forth in Chapter 61G17-6 FAC and the requirements for Second-Order Class II Vertical Control Surveys as established by the Federal Geodetic Control Sub-committee.

Vertical Control

All elevations are based on National Geodetic Survey Benchmarks “H-437” and “J-437” both Second Order, Class I vertical control monuments. The vertical datum used was NAVD 88 (North American Vertical Datum of 1988).

Level Lines

All level runs were double-run under differing atmospheric conditions and meet or exceed the formula of the Square Root in miles of the level run multiplied by 0.03’. A Leica DNA 3003 digital level and two 3 meter aluminum bar-coded “Invar Rods” with aluminum struts were utilized to obtain all leveling data.

The processing of the field data was performed by and under the supervision of Mr. Ronnie Taylor, Florida’s NGS Advisor. NGS’ “WDDPROC” leveling software was utilized to process the field data and to create the NGS benchmark descriptions.

Prepared by: **Hyatt Survey Services, Inc.**
11007 8th Avenue East
Bradenton, Florida 34212
(941) 748-4693

Prepared for: **South Florida Water Management District**
3301 Gun Club Road
West Palm Beach, Florida 33406

Notes:

- 1) This survey meets all applicable requirements of the Florida Minimum Technical Standards as contained in Chapter 61G17-6 FAC.
- 2) 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.

Hyatt Survey Services, Inc.
Russell P. Hyatt, PSM, VP
Professional Surveyor and Mapper
License Number 5303

Signed: _____

Seal:

BUCK05



Prime Contractor: George F. Young, Inc.
Subcontractor: Hyatt Survey Services, Inc.
Date of Photo: June 17, 2005
View: Well Site

BUCK05B



Prime Contractor: George F. Young, Inc.
Subcontractor: Hyatt Survey Services, Inc.
Date of Photo: June 9, 2005
View: Pipe

BUCK05C



Prime Contractor: George F. Young, Inc.
Subcontractor: Hyatt Survey Services, Inc.
Date of Photo: June 9, 2005
View: Well

LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 - INST TYPE (2000, 2002, 3000, 3003)	INFO 4 - TEMP CODE (0 for C - 1 for F)
5/17/5				

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
		396		

CODE 11 - BEGINNING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR F (3)
20	BCKG	BCKG-A 2005	1430	1	90°	

CODE 99 - ENDING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S =
19	BCK5		1530	1	89°	0/2

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED (MB (d))	ELEV DIFFERENCE (GROUND HGT)
3	297.20	-8.2	+0.1918

CLOSURE	REMARKS
F	LAST SHOT 3M TOO LONG, SHOT BY ACCIDENT ACCEPTED SHOT
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

OTHER INFO CODES

CODE 22 - REJECT PREVIOUS BACKSIGHT AND FORSIGHT (NO INFO ENTRIES - PRESS REC)

CODE 33 - GRADIENT TEMPERATURES (INFO 1 - LOWER PROBE - NO DECIMAL 761 FOR 76.1)
(INFO 2 - UPPER PROBE - NO DECIMAL 761 FOR 76.1)

CODE 9999 - END OF DAY, CHG OBS, CHG EQUIPMENT (NO INFO ENTRIES - PRESS REC)

LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 - (INST TYPE (2000, 2002, 3000, 3003))	INFO 4 - TEMP CODE (0 for C - 1 for F)
5/17/15				

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
		396		

CODE 11 - BEGINNING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR F/B
19	BUCKS	—	1510	1	89°	F

CODE 99 - ENDING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S =
18	BUCK4	BUCKAA "2005"	1711	1	87°	0/2

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
7	515.2	-1.0	-0.084

CLOSURE REMARKS

F	REMARKS
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

OTHER INFO CODES

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CODE 33 - GRADIENT TEMPERATURES (INFO 1 - LOWER PROBE - NO DECIMAL 761 FOR 76.1)
(INFO 2 - UPPER PROBE - NO DECIMAL 761 FOR 76.1)

CODE 9999 - END OF DAY, CHG OBS, CHG EQUIPMENT (NO INFO ENTRIES - PRESS REC)

0.079

LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT
2	1	Q		

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 -INST TYPE (2000, 2002, 3000, 3003)	INFO 4 -TEMP CODE (0 for C - 1 for F)
5/18/5	1	SL	3003	82°

CODE 2 - EQUIPMENT USED

INFO 1 -INST SERIAL #	INFO 2 -INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
283A70	-0.3	396	29572	29720

CODE 11 - BEGINNING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR (F) B
18	BKK4	BKK4-A 2005"	0830	1	84°	

CODE 99 - ENDING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S =
19	BKKS		1028	1	84°	1/1

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
5	511.2	-1.0	+0.625

CLOSURE	REMARKS
F	
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

OTHER INFO CODES

CODE 22 - REJECT PREVIOUS BACKSIGHT AND FORSIGHT (NO INFO ENTRIES - PRESS REC)

CODE 33 - GRADIENT TEMPERATURES (INFO 1 - LOWER PROBE - NO DECIMAL 761 FOR 76.1) (INFO 2 - UPPER PROBE - NO DECIMAL 761 FOR 76.1)

CODE 9999 - END OF DAY, CHG OBS, CHG EQUIPMENT (NO INFO ENTRIES - PRESS REC)

47
447

LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF
			1	

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT
2	1	Q		

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 -INST TYPE (2000, 2002, 3000, 3003)	INFO 4 -TEMP CODE (0 for C - 1 for F)
21.09.05	1	SR	3003	84 82

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
283420	+5.7	396	29572	29720

CODE 11 - BEGINNING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR F/B
2016	BULL	BULL	10:00	1	84.5	B

CODE 99 - ENDING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S #
2017	BULL	BULL		1	84.5	0/2

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
2	200.3	+0.1	84.046

CLOSURE

REMARKS

F	
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

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LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF
			2	2

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT
2	1	4		

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 - INST TYPE (2000, 2002, 3000, 3003)	INFO 4 - TEMP CODE (0 for C - 1 for F)
5/4/15	1	SV		74°

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
283410	-6.2	396	29572	29720

CODE 11 - BEGINNING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR F/B
					74°	

CODE 99 - ENDING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S #

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)

CLOSURE	REMARKS
F	
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

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LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF
			1	2

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT
2	1	Q		

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 - INST TYPE (2000, 2002, 3000, 3003)	INFO 4 - TEMP CODE (0 for C - 1 for F)
5.A.5	1	SK		81°

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
283420	-6.2	396	297 29720	29720

CODE 11 - BEGINNING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR F/B
018	BKX-4	BKX-4A 2005	09:00 AM	1	81°	BS

CODE 99 - ENDING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S #
019	BKX-5	BKX-5-B 2005	11:20 AM	1	84°	00

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
5	511.5	-1.0	+0.0196

CLOSURE	REMARKS
F	
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH
 SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY
OTHER INFO CODES
 CODE 22 - REJECT PREVIOUS BACKSIGHT AND FORSIGHT (NO INFO ENTRIES - PRESS REC)
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 (INFO 2 - UPPER PROBE - NO DECIMAL 761 FOR 76.1)
 CODE 9999 - END OF DAY, CHG OBS, CHG EQUIPMENT (NO INFO ENTRIES - PRESS REC)

27 27 135

LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF
			1	3

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT
2	1	Q		

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

INFO 1 DATE (MMDDYY)	INFO 2 OBS'R #	OBS'R INIT'S	INFO 3 - INST TYPE (2000, 2002, 3000, 3003)	INFO 4 - TEMP CODE (0 for C - 1 for F)
5/5/5	1	SR	3003	73°

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
283420	+3.0	396	29572	29720

CODE 11 - BEGINNING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR
0018	BUCKA	BUCK4-A 2005	08:20 AM	1	73°	Back

CODE 99 - ENDING SECTION INFORMATION

SPSN =	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W/S #
0019	BUCK5	BUCK5-B	10:30 AM	1	81	1/0

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
5	512.7	-0.2	+0.0400

CLOSURE	REMARKS
F	
B	
DIF	
ALW'D	

+ 0.063

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

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LEICA DIGITAL GEODETIC LEVELING - BACKUP RECORDING SHEET

LINE	PROJECT	FILENAME	PAGE	OF
			2	3

SURVEY ORDER	SURVEY CLASS	TIME ZONE CODE	TEMP PROBE TOP HGT	TEMP PROBE BOTTOM HGT

CODE 1 - BEGINNING OF DAY OR CHANGE IN OBSERVER OR INSTRUMENT TYPE

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5/5/5				

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
		396		

CODE 11 - BEGINNING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	DIR F (B)
0011	BLACK 5	BLACK-5B "2005"	1040	1	82°	B

CODE 99 - ENDING SECTION INFORMATION

SPSN #	BM DESIG	BENCH MARK STAMPING	INFO 1 TIME (HHMM)	INFO 2 Rod On Mark #	INFO 3 TEMP	INFO 4 W: S =
0020	BLACK 6	BLACK-6A "2005"	1326 PM	1	81°	1/0

SECTION OBSERVATIONS INFORMATION (Recall from level using UP/DN arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED (MB (d))	ELEV DIFFERENCE (GROUND HGT)
3	298.1	314.0	-0.1927

CLOSURE	REMARKS
F	
B	
DIF	
ALW'D	

WIND CODE - (0) 0-6 MPH (1) 6-15 MPH (2) >15 MPH

SUN CODE - (0) 25% SUNNY (1) 25-75% SUNNY (2) >75% SUNNY

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CODE 9999 - END OF DAY, CHG OBS, CHG EQUIPMENT (NO INFO ENTRIES - PRESS REC)

CKEECHREE MOUNT WELL

5/4/5

+	DIST	-	DIST
1.7910	20.00		
1.2216	19.88	0.9961	39.94
COLL = -6.2		2.0153	40.05

+	DIST	-	DIST
1.9424	49.99		
1.3769	51.93	1.9179	50.7
1.766	50.09	1.2525	52.06
1.4691	48.09	1.4195	50.05
1.3407	35.02	1.2819	47.71
1.4233	20.16	1.3973	34.72
END SECTION		1.4037	21.22

1.8818	50.15		
		1.8839	50.06

DESC
 ROD A
 ROD B
 ROD A

↑ S. ROER
 (A) 9 H WHEELS
 (B) 9 DIVES
 OVERCAST 80°

DESC
 BUCK 4 A SSN# 0018

TP-1
 TP-2
 TP-3
 TP-4
 TP-5

SHOT A-A
 & S-B W/TIP ON

π BUCK 5-B SSN# 0019
 BUCK 5-B

BUCK 4-A SSN# 0018
 TP-1

↑ HEAD
 BATTERIES

05-1933

5/5/33

10

CREEK TOE MOUNT WELLS

	WEST		EAST
1.751	19.19		
1.315	19.28	1.732	21.15
+3.0	20.11	2.050	21.15
- 1.7678	52.18		
1.4169	51.51	1.7812	49.72
1.1706	50.43	1.7965	51.15
1.5520	57.71	1.4907	51.20
1.4653	30.22	1.4412	57.16
1.4034	16.19	1.4151	30.22
END SECTION		1.3634	16.19
1.3852	50.34		
1.5205	54.60	1.4779	50.15
1.5257	23.75	1.6031	54.64
1.5919	20.47	1.5767	73.21
END SECTION		1.5585	20.53
1.6317	50.35		
1.4351	47.72	1.5469	50.62
1.4817	41.02	1.5082	47.74
1.4376	33.54	1.4561	41.02
FORGET TO INSERT 10 FT # 004		1.4532	33.85

DESE

RO 1

RO 2

RO 4

BUCK 4A

TP-1

TP-2

TP-3

TP-4

TP-5

BUCK 5-B

BUCK 5-B

TP-1

TP-2

TP-3

BUCK 6-A

BUCK 6-A

TP-1

TP-2

TP-3

BUCK 8-A

IN PLACE
(A) T. H. W. 1/2
B. T. B. V. 1/2

351 0019

351 0019

STICK TRUCK

351 0070

351 0051

I	DIST	-	DIST
1.7561	19.99		
1.2318	19.88	0.9836	39.75
+3.0 COLL		2.0050	40.0
1.7678	50.18		
1.1169	51.51	1.7518	49.50
1.1706	50.43	1.1965	51.15
5580	57.71	1.4907	51.50
1.4653	30.22	1.4412	57.76
1.4034	16.19	1.4454	30.45
END SECTION		1.3634	16.?
1.3852	50.3A		
1.5208	54.60	1.4779	50.15
1.5257	23.75	1.6031	54.64
1.5919	20.47	1.5767	23.88
END SECTION		1.5585	20.33
1.6317	50.35		
1.4351	47.22	1.5469	52.67
1.4827	44.02	1.5082	47.24
1.4376	33.54	1.4567	44.02
* FORGOT TO INSERT ID PT # 0021 *		1.4532	33.85

DEEC	(A) ↑	(B) ↑	ED REGISTER
RED A			H. NEEDLE
RED B			S. VES
RED A			
BUCK-4A			SSN CODE
TP-1			
TP-2			
TP-3			
TP-4			
TP-5			
BUCK 5-B			SSN # 0019
BUCK 5-B			" "
TP-1			STICK TRUCK
TP-2			
TP-3			
BUCK 6-A			SSN-0020 ✓
BUCK 6-A			" "
TP-1			
TP-2			
TP-3			
BUCK 8-B 8-A			SSN-0021

CREECHBEE MALT WELL

5/17/5

+	DIST	-	DIST
1.3968	34.96	1.4381	35.24
1.4174	38.77	1.3955	35.69
END SECTION		1.4019	46.35
1.4399	35.57		
1.5993	45.38	1.4724	35.46
1.4106	35.32	1.7160	45.17
1.5397	35.56	1.3278	35.42
1.3594	34.41	1.5530	35.36
1.3265	42.56	1.1487	35.39
1.8119	13.80	1.4516	42.44
2.0040	14.54	2.3468	13.36
		1.5413	15.49

DESC	(B) ↑	(A) ↑	S. ROPER
TP-2			D. PEE
TP-3			D. JESY
BUCK 5-B	SSN-19		3 MI TOO
BUCK-5 B	"		LONG
TP-1			
TP-2			
TP-3			
TP-4			
TP-5			
TP-6			
TP-7			
(TP-8) BUCK 4-A	SSN-18		
BUCK 4-A	" "		

05.12.33

5/17/5

24

CREEK CREEK MOUNT. WELL

+	DIST	-	DIST	DESC	TR	STORY
1.3968	24.15	1.4381	35.24	TP-2	(B) 1	D. REE
1.4174	38.77	1.3956	35.69	TP-3	(A) 3	TO VESS
END SECTION		1.4019	46.35	BULK B-E	SSN-17	3 M. ONLY
1.4399	35.57			BULK E-B	"	LONG
1.5993	45.28	1.4724	35.36	TP-1		
1.4126	35.32	1.7160	45.17	TP-2		
1.5397	36.56	1.3278	35.42	TP-3		
1.3594	31.41	1.5530	35.36	TP-4		
1.3265	42.36	1.1487	35.37	TP-5		
1.8119	13.80	1.4516	42.44	TP-6		
2.0010	14.54	2.3468	13.36	TP-7		
		1.5413	15.49	(JP-8) BULK A-A	SSN-18	
				BULK A-A	" "	

CKEECHOFFE MONT. WELLS

5/18/5

+	DIST	-	DIST
1.8304	19.92		
1.2466	19.95	1.0084	40.02
<u>-0.3</u>		2.0685	40.03
1.8997	45.03		
1.9971	46.58	1.9046	45.15
1.4298	39.09	2.0364	45.78
1.4292	39.47	1.4582	40.11
1.4951	38.85	1.3912	39.19
1.4795	46.13	1.3985	39.65
END SECTION		1.4787	46.23
1.6343	39.36		
1.5949	44.70	1.5263	39.20
1.5594	20.01	1.5478	44.60
1.2978	28.88	1.5475	20.18
END SECTION		1.4679	29.64
1.2116	44.11		
1.4400	45.07	1.3511	44.66
1.6740	10.48	1.6193	45.18
1.1349	15.27	1.2692	10.47
END SECTION		1.4841	15.65

DESK	TR	S ROVER
ROD A	(B) 9	D. REE
ROD B	(A) 9	D. VYES
ROD A		
BUCK 4-A	SSN-18	
TP-1		
TP-2		
TP-3		
TP-4		
TP-5		
BUCK 5-B	SSN-19	
BUCK 4-A	SSN-18	
TP-1		
TP-2		
TP-3		
BUCK 3-B	SSN-17	
BUCK 3-B	" "	
TP-1		
TP-2		
TP-3		
BUCK-2A	SSN-16	

05-1233

OVERCROBBE MOUNT. WELLS

+	WEST		EAST
1.8304	19.92		
1.3466	19.95	1.0084	43.72
(-0.3)		2.0625	40.03
1.2997	45.03		
1.3911	46.58	1.1046	45.15
1.4298	39.09	2.0307	45.78
1.4292	31.47	1.4522	40.11
1.4451	38.25	1.3912	39.19
1.4795	46.13	1.3185	39.65
END SECTION		1.4787	46.23
1.6343	39.26		
1.5849	44.70	1.5263	37.25
1.5594	20.01	1.5878	44.60
1.2978	28.88	1.5175	20.18
END SECTION		1.4679	29.54
1.2116	44.11		
1.4400	45.01	1.3511	44.66
1.6740	10.48	1.6193	45.18
1.1348	15.27	1.2892	19.47
END SECTION		1.3841	15.65

5/18/5

25

DEEG	TR. S. POWER
1200 A	(B) 9 D. REF
1200 B	(A) 7 D. VES.
1200 A	
BUCK 4-A	SSN-18
TP-1	
TP-2	
TP-3	
TP-4	
TP-5	
BUCK 5-B	SSN-19
BUCK 4-A	SSN-18
TP-1	
TP-2	
TP-3	
BUCK 3-B	SSN-17
BUCK 3-B	" "
TP-1	
TP-2	
TP-3	
BUCK 2-A	SSN-16

Peters

Buck5.met

Identification_Information:

Citation:

Citation_Information:

Originator: George F. Young, Inc.
Publication_Date: Unknown
Publication_Time: Unknown
Title: Buck Island Ranch Monitoring Well Benchmarks
Publication_Information:
Publication_Place: Not published
Publisher: None

Description:

Abstract:

South Florida Water Management District
Buck Island Ranch Monitoring Well Benchmarks

Purpose:

To establish NAVD 88 and NGVD 29 elevations and benchmarks at each of twenty two well sites.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20050217

Ending_Date: 20050617

Currentness_Reference: Pending NGS Approval

Status:

Progress: In work

Maintenance_and_Update_Frequency: Unknown

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -081°13'03"

East_Bounding_Coordinate: -080°12'06"

North_Bounding_Coordinate: +27°08'41"

South_Bounding_Coordinate: +27°07'50"

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Record Survey

Theme_Keyword: Well Site

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: S. F. W. M. D. Well L28WFUVM

Place_Keyword: Sec. 18, Twp. 48 S., Rge. 33 E.

Place_Keyword: Hendry County, Florida

Access_Constraints: None

Use_Constraints: None

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Howard Ehmke

Contact_Organization: South Florida Water Management

District

Contact_Position: Professional Surveyor & Mapper

Contact_Address:

Address_Type: mailing and physical address

Address: 3301 Gun Club Road

City: West Palm Beach

State_or_Province: Florida

Postal_Code: 33406

Country: USA

Contact_Voice_Telephone: (561) 686-8800, Ext. 4636

Contact_Facsimile_Telephone: (561) 681-6265

Contact_Electronic_Mail_Address: hehmke@sfwmd.gov

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

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

This survey was prepared using sub-meter GPS and DNA 3003 Leveling instruments. The horizontal location of the well and benchmark was performed using sub-meter GPS. The vertical data was collected using a Leica DNA 3003 Level. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/90. Elevations are based on NAVD 88

Logical_Consistency_Report:

Horizontal data was established using Coastguard corrected sub-meter GPS
Vertical data was established using control points H-437 and J-437.

Completeness_Report:

Horizontal location taken at approximate center of well.
Site Benchmark is a 3" bronze disk set in top of poured in place 48"x12" round concrete monument
To reach

THE MARK IS ABOUT 15 MI SOUTHEAST OF LAKE PLACID, 12.5 MI NORTHWEST OF LAKEPORT IN SECTION 34, TOWNSHIP 38 SOUTH, RANGE 31 EAST. TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 27 AND STATE ROAD 70, GO EAST ON STATE ROAD 70 FOR 7.16 MI TO JC DURRANCE ROAD (A DIRT ROAD) ON THE RIGHT, TURN RIGHT AND GO SOUTH FOR 4.51 MI TO THE END OF JC DURRANCE ROAD AND A TEE INTERSECTION WITH UNNAMED DIRT ROAD. TURN RIGHT, GO THROUGH A GATE AND HEAD WEST 0.5 MI TO THREE GATES. GO THROUGH THE CENTER GATE AND HEAD SOUTH 0.59 MI TO THE SOUTH SIDE OF A BRIDGE OVER A CANAL AND THE NORTH SIDE OF A LARGE FENCED PASTURE. THE MARK IS 2,040 FT WEST AND 1,999 FT SOUTH OF THE SOUTH END OF THE BRIDGE. THE MARK IS LOCATED ON THE SOUTH SIDE OF A MONITORING WELL ENCLOSED BY A 4 FT WOODEN FENCE. THE MARK IS 1.5 IN STEEL PIPE, 1 FT INSIDE THE FENCED ENCLOSURE, SET 3 IN ABOVE THE SURROUNDING GROUND. THE NAD 1983 STATE PLANE COORDINATE POSITION OF THE 588575 FT. Notable Land

THE MARK IS ABOUT 15 MI SOUTHEAST OF LAKE PLACID, 12.5 MI NORTHWEST OF LAKEPORT IN SECTION 34, TOWNSHIP 38 SOUTH, RANGE 31 EAST. TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 27 AND STATE ROAD 70, GO EAST ON STATE ROAD 70 FOR 7.16 MI TO JC DURRANCE ROAD (A DIRT ROAD) ON THE RIGHT, TURN RIGHT AND GO SOUTH FOR 4.51 MI TO THE END OF JC DURRANCE ROAD AND A TEE INTERSECTION WITH UNNAMED DIRT ROAD. TURN RIGHT, GO THROUGH A GATE AND HEAD WEST 0.5 MI TO THREE GATES. GO THROUGH THE CENTER GATE AND HEAD SOUTH 0.59 MI TO THE SOUTH SIDE OF A BRIDGE OVER A CANAL AND THE NORTH SIDE OF A LARGE FENCED PASTURE. THE MARK IS 2040 FT WEST AND 1995FT SOUTH OF THE SOUTH END OF THE BRIDGE. THE MARK IS A 3 IN PVC MONITORING WELL PIPE INSIDE A STEEL BOX SURROUNDED BY A 4 FT WOODEN FENCE. THE MARK IS SET 4 FT ABOVE THE

Buck5.met
SURROUNDING GROUND. THE NAD 1983 STATE
PLANE COORDINATE POSITION OF THE MARK IS
1017238 FT, E=588575 FT. Notable Land marks:
NONE
NONE
N270755
W0811228

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The horizontal positions were established with

sub-meter

GPS

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

Second Order, Class II

The methodology was approved by Mr. Ronnie Taylor,
State, Geodetic Advisor

The NAVD 88 elevations established for this survey

was

determined by using the published values for

benchmark

H-437 and J-437.

Lineage:

Process_Step:

Process_Description:

Horizontal data was established using Coastguard
corrected sub-meter GPS

Vertical data was established using control
points H-437 and J-437.

Process_Date: 20050617

Metadata_Reference_Information:

Metadata_Date: 20050617

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Catherine A. Pollak

Contact_Organization: George F. Young, Inc.

Contact_Position: Project Surveyor

Contact_Address:

Address_Type: mailing and physical address

Address:

299 Dr. Martin Luther King, Jr.

Street, North

City: St. Petersburg

State_or_Province: Florida

Postal_Code: 33701

Country: USA

Contact_Voice_Telephone: (727) 822-4317

Contact_Facsimile_Telephone: (727) 822-2919

Contact_Electronic_Mail_Address: pollak@georgefyoung.com

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

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial

Metadata

Metadata_Standard_Version: 19980601

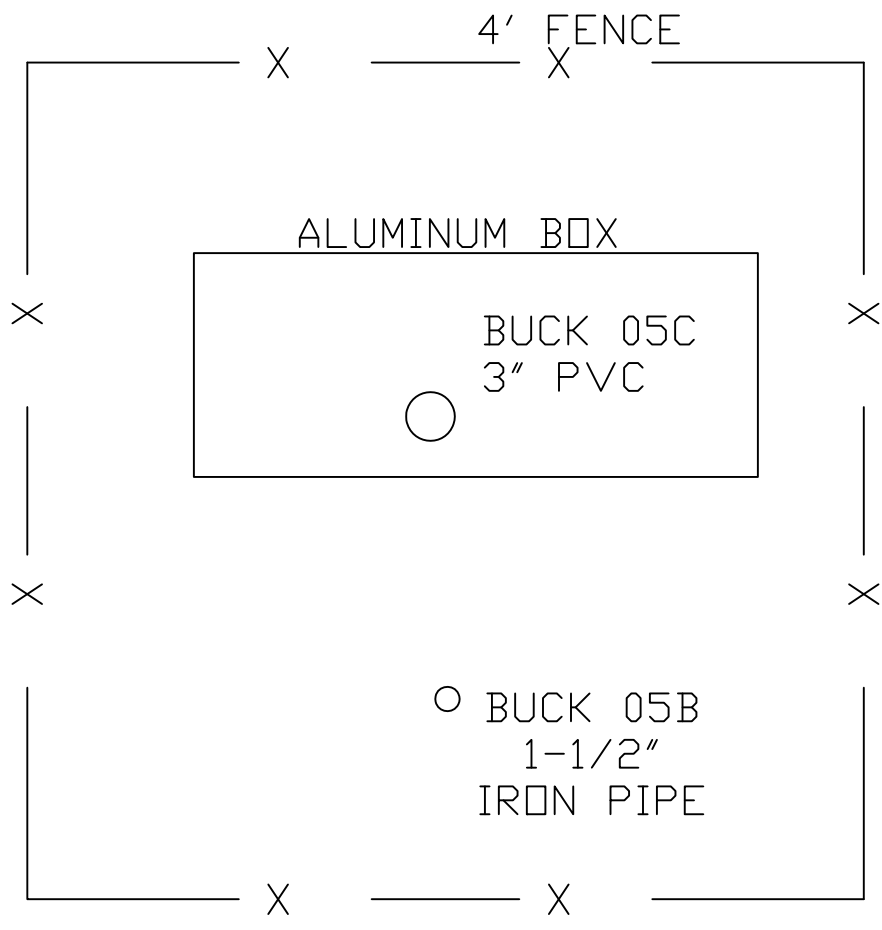


SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY: HIGHLANDS		PROJECT: BUCK ISLAND RANCH	DESIGNATION: BUCK 05B
SECTION 34		TOWNSHIP 38 SOUTH	RANGE 31 EAST
GEOGRAPHIC INDEX OF QUAD			
Established by <u>HYATT SURVEY SERVICES</u> ____ Recovered by		NAME OF QUADRANGLE: BRIGHTON NW	
SURVEYOR <u>R. HYATT</u> DATE <u>06/16/2005</u>		FIELD BOOK <u>154</u> PAGE <u>1 - 45</u>	
HORIZONTAL DATUM: 1927 1983 Other _____ (circle one) ZONE E or W			
VERTICAL DATUM: MSL 1929 1988 Other _____ (circle one)			
CONTROL ACCURACY: HORIZONTAL 1 2 3 4th _____ (circle one) VERTICAL 1 2 3			
STATE PLANE COORDINATES	X = 588575 FT	Y = 1017234 FT	EL. = 8.3129 m
LATITUDE : N270755		LONGITUDE: W0811228	
DESCRIPTION			
<p>To Reach: THE MARK IS ABOUT 15 MI SOUTHEAST OF LAKE PLACID, 12.5 MI NORTHWEST OF LAKEPORT IN SECTION 34, TOWNSHIP 38 SOUTH, RANGE 31 EAST.</p> <p>TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 27 AND STATE ROAD 70, GO EAST ON STATE ROAD 70 FOR 7.16 MI TO JC DURRANCE ROAD (A DIRT ROAD) ON THE RIGHT, TURN RIGHT AND GO SOUTH FOR 4.51 MI TO THE END OF JC DURRANCE ROAD AND A TEE INTERSECTION WITH UNNAMED DIRT ROAD. TURN RIGHT, GO THROUGH A GATE AND HEAD WEST 0.5 MI TO THREE GATES. GO THROUGH THE CENTER GATE AND HEAD SOUTH 0.59 MI TO THE SOUTH SIDE OF A BRIDGE OVER A CANAL AND THE NORTH SIDE OF A LARGE FENCED PASTURE. THE MARK IS 2,040 FT WEST AND 1,999 FT SOUTH OF THE SOUTH END OF THE BRIDGE.</p> <p>THE MARK IS LOCATED ON THE SOUTH SIDE OF A MONITORING WELL ENCLOSED BY A 4 FT WOODEN FENCE. THE MARK IS 1.5 IN STEEL PIPE, 1 FT INSIDE THE FENCED ENCLOSURE, SET 3 IN ABOVE THE SURROUNDING GROUND. THE NAD 1983 STATE PLANE COORDINATE POSITION OF THE MARK IS N=1017234 FT, E=588575 FT.</p> <p>Notable Land marks: NONE</p>			

SKETCH: SEE ATTACHED SKETCH



TITLE
SKETCH OF BUCK 05 MONITORING WELL

Hyatt Survey Services, Inc.
Geographic Data Specialists

11007 8TH AVENUE EAST BRADENTON, FLORIDA 34212
PH. (941) 748-4693 FAX (941) 744-1643 LB No.: 7203

JOB NUMBER 12-0538	REVISION	SCALE NOT TO SCALE	DATE 6/17/05	DRAWN BY RSF	FILE NAME BUCK05.DWG	SHEET 1 OF 1
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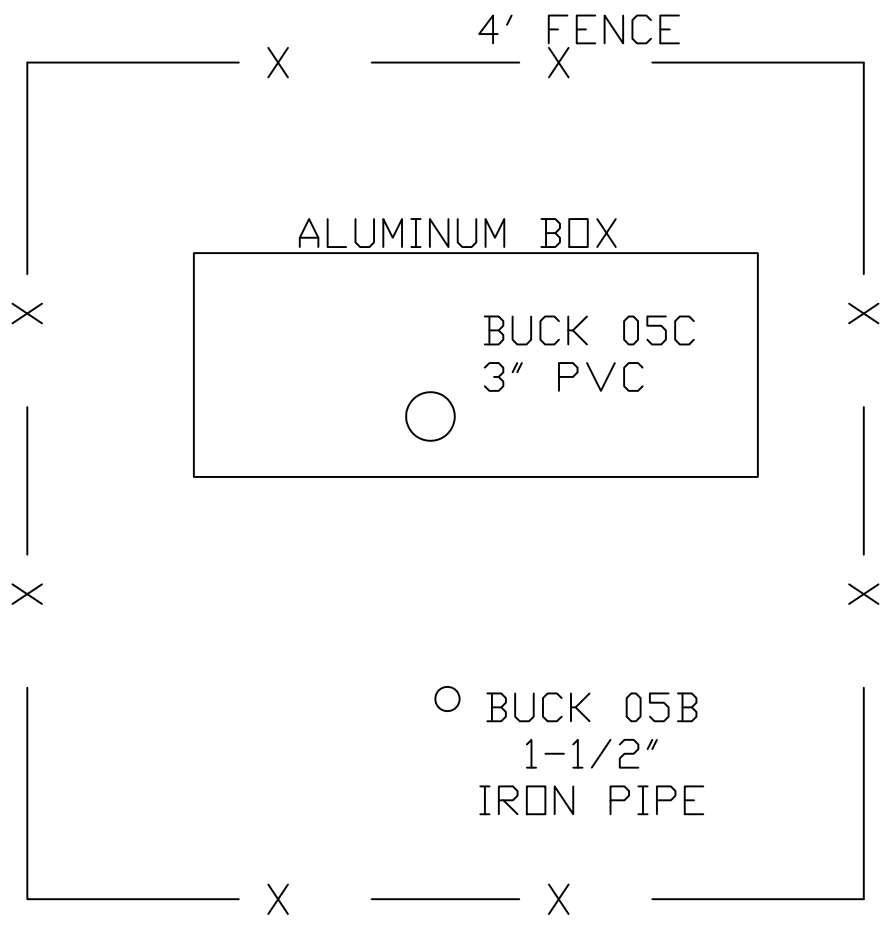


SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY: HIGHLANDS		PROJECT: BUCK ISLAND RANCH		DESIGNATION: BUCK 05C	
SECTION 34		TOWNSHIP 38 SOUTH		RANGE 31 EAST	
GEOGRAPHIC INDEX OF QUAD					
Established by <u>HYATT SURVEY SERVICES</u> ____ Recovered by			NAME OF QUADRANGLE: BRIGHTON NW		
SURVEYOR <u>R. HYATT</u> DATE <u>06/16/2005</u>			FIELD BOOK <u>154</u> PAGE <u>1 - 45</u>		
HORIZONTAL DATUM: 1927 1983 Other _____ (circle one) ZONE E or W					
VERTICAL DATUM: MSL 1929 1988 Other _____ (circle one)					
CONTROL ACCURACY: HORIZONTAL 1 2 3 4th _____ (circle one) VERTICAL 1 2 3					
STATE PLANE COORDINATES		X = 588575 FT	Y = 1017238 FT	EL. = 9.1727 m	
LATITUDE : N270755			LONGITUDE: W0811228		
DESCRIPTION					
<p>To Reach: THE MARK IS ABOUT 15 MI SOUTHEAST OF LAKE PLACID, 12.5 MI NORTHWEST OF LAKEPORT IN SECTION 34, TOWNSHIP 38 SOUTH, RANGE 31 EAST.</p> <p>TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 27 AND STATE ROAD 70, GO EAST ON STATE ROAD 70 FOR 7.16 MI TO JC DURRANCE ROAD (A DIRT ROAD) ON THE RIGHT, TURN RIGHT AND GO SOUTH FOR 4.51 MI TO THE END OF JC DURRANCE ROAD AND A TEE INTERSECTION WITH UNNAMED DIRT ROAD. TURN RIGHT, GO THROUGH A GATE AND HEAD WEST 0.5 MI TO THREE GATES. GO THROUGH THE CENTER GATE AND HEAD SOUTH 0.59 MI TO THE SOUTH SIDE OF A BRIDGE OVER A CANAL AND THE NORTH SIDE OF A LARGE FENCED PASTURE. THE MARK IS 2040 FT WEST AND 1995 FT SOUTH OF THE SOUTH END OF THE BRIDGE.</p> <p>THE MARK IS A 3 IN PVC MONITORING WELL PIPE INSIDE A STEEL BOX SURROUNDED BY A 4 FT WOODEN FENCE. THE MARK IS SET 4 FT ABOVE THE SURROUNDING GROUND. THE NAD 1983 STATE PLANE COORDINATE POSITION OF THE MARK IS N=1017238 FT, E=588575 FT.</p> <p>Notable Land marks: NONE</p>					

SKETCH: SEE ATTACHED SKETCH



TITLE
SKETCH OF BUCK 05 MONITORING WELL

Hyatt Survey Services, Inc.
Geographic Data Specialists

11007 8TH AVENUE EAST BRADENTON, FLORIDA 34212
PH. (941) 748-4693 FAX (941) 744-1643 LB No.: 7203

JOB NUMBER
12-0538

REVISION

SCALE
NOT TO SCALE

DATE
6/17/05

DRAWN BY
RSF

FILE NAME
BUCK05.DWG

SHEET
1 OF 1

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12

1 National Geodetic Survey, Retrieval Date = JANUARY 26, 2005

AE6391 *****

AE6391 DESIGNATION - H 437
 AE6391 PID - AE6391
 AE6391 STATE/COUNTY- FL/HIGHLANDS
 AE6391 USGS QUAD - BRIGHTON NW (1983)

AE6391
 AE6391 *CURRENT SURVEY CONTROL

AE6391* NAD 83(1986)- 27 08 14. (N) 081 12 06. (W) SCALED
 AE6391* NAVD 88 - 9.395 (meters) 30.82 (feet) ADJUSTED

AE6391
 AE6391 GEOID HEIGHT- -25.20 (meters) GEOID03
 AE6391 DYNAMIC HT - 9.380 (meters) 30.77 (feet) COMP
 AE6391 MODELED GRAV- 979,125.1 (mgal) NAVD 88

AE6391 VERT ORDER - SECOND CLASS I

AE6391 The horizontal coordinates were scaled from a topographic map and have
 AE6391 an estimated accuracy of +/- 6 seconds.

AE6391 The orthometric height was determined by differential leveling
 AE6391 and adjusted by the National Geodetic Survey in March 1998.

AE6391 The geoid height was determined by GEOID03.

AE6391 The dynamic height is computed by dividing the NAVD 88
 AE6391 geopotential number by the normal gravity value computed on the
 AE6391 Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AE6391 degrees latitude (g = 980.6199 gals.).

AE6391 The modeled gravity was interpolated from observed gravity values.

AE6391;
 AE6391; SPC FL E - North East Units Estimated Accuracy
 310,620. 180,010. MT (+/- 180 meters Scaled)

AE6391 SUPERSEDED SURVEY CONTROL

AE6391 No superseded survey control is available for this station.

AE6391 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML800016(NAD 83)

AE6391_MARKER: DV = VERTICAL CONTROL DISK

AE6391_SETTING: 38 = BRIDGE ABUTMENT

AE6391_STAMPING: H 437 1995

AE6391_MARK LOGO: NGS

AE6391_MAGNETIC: N = NO MAGNETIC MATERIAL

AE6391_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AE6391_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AE6391+SATELLITE: SATELLITE OBSERVATIONS - 1995

AE6391 HISTORY - Date Condition Report By
 AE6391 HISTORY - 1995 MONUMENTED FLDEP

AE6391 STATION DESCRIPTION

AE6391 DESCRIBED BY FL DEPT OF ENV PRO 1995 (LGB)
 AE6391 THE MARK IS ABOUT 15.0 MI (24.1 KM) SOUTHEAST OF LAKE PLACID, 12.5 MI
 AE6391 (20.1 KM) NORTHWEST OF LAKEPORT IN SECTION 27, TOWNSHIP 38 SOUTH,
 AE6391 RANGE 31 EAST. TO REACH THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY
 AE6391 27 AND STATE ROAD 70 SOUTH OF LAKE PLACID, GO EAST ON STATE ROAD 70
 AE6391 FOR 7.7 MI (12.4 KM) TO THE WEST END OF THE BRIDGE OVER CANAL C 41
 AE6391 (HARNEY POND CANAL), TURN RIGHT AT THE WEST END OF BRIDGE, PASSING
 AE6391 THROUGH THE GATE, GO SOUTH ON THE LEVEE ROAD FOR 1.05 MI (1.69 KM) TO
 AE6391 A SHARP CURVE TO THE RIGHT, CONTINUE WEST ON THE LEVEE ROAD FOR 1.85
 AE6391 MI (2.98 KM) TO A CURVE TO THE LEFT, CONTINUE SOUTH ON THE LEVEE ROAD
 AE6391 FOR 2.1 MI (3.4 KM) TO A CURVE TO THE LEFT, CONTINUE SOUTHEAST ON THE
 AE6391 LEVEE ROAD FOR 2.7 MI (4.3 KM) TO A BRIDGE ON THE LEFT AND THE MARK
 AE6391 SET FLUSH IN THE SOUTHWEST BRIDGE ABUTMENT. LOCATED 41.7 FT (12.7 M)

DATASHEETS

AE6391'NORTH OF THE APPROXIMATE CENTERLINE OF THE LEVEE ROAD, 18.9 FT (5.8 M)
AE6391'NORTH OF A CARSONITE WITNESS POST, 8.4 FT (2.6 M) WEST OF THE
AE6391'APPROXIMATE CENTERLINE OF THE BRIDGE AND 5.9 FT (1.8 M) SOUTH OF A
AE6391'GATE. NOTE ALL GATES ON LEVEE ARE LOCKED, FOR KEY CONTACT CARL ZEISS,
AE6391'SOUTH FLORIDA WATER MANAGEMENT DISTRICT, WEST PALM BEACH, FL. PHONE
AE6391'NUMBER (407) 686-8800.

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

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.12

1 National Geodetic Survey, Retrieval Date = JANUARY 26, 2005

AE6392 *****

AE6392 DESIGNATION - J 437
 AE6392 PID - AE6392
 AE6392 STATE/COUNTY- FL/HIGHLANDS
 AE6392 USGS QUAD - BRIGHTON NW (1983)

AE6392
 AE6392 *CURRENT SURVEY CONTROL

AE6392* NAD 83(1999)- 27 08 13.27828(N) 081 11 02.84354(W) ADJUSTED
 AE6392* NAVD 88 - 11.555 (meters) 37.91 (feet) ADJUSTED

AE6392
 AE6392 X - 870,509.596 (meters) COMP
 AE6392 Y - -5,612,861.809 (meters) COMP
 AE6392 Z - 2,891,728.917 (meters) COMP
 AE6392 LAPLACE CORR- -3.52 (seconds) DEFLEC99
 AE6392 ELLIP HEIGHT- -13.67 (meters) (05/31/01) GPS OBS
 AE6392 GEOID HEIGHT- -25.25 (meters) GEOID03
 AE6392 DYNAMIC HT - 11.537 (meters) 37.85 (feet) COMP
 AE6392 MODELED GRAV- 979,122.9 (mgal) NAVD 88

AE6392
 AE6392 HORZ ORDER - FIRST
 AE6392 VERT ORDER - SECOND CLASS I
 AE6392 ELLP ORDER - FOURTH CLASS I

AE6392.The horizontal coordinates were established by GPS observations
 AE6392.and adjusted by the National Geodetic Survey in May 2001.

AE6392.The orthometric height was determined by differential leveling
 AE6392.and adjusted by the National Geodetic Survey in March 1998.

AE6392.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AE6392.The Laplace correction was computed from DEFLEC99 derived deflections.

AE6392.The ellipsoidal height was determined by GPS observations
 AE6392.and is referenced to NAD 83.

AE6392.The geoid height was determined by GEOID03.

AE6392.The dynamic height is computed by dividing the NAVD 88
 AE6392.geopotential number by the normal gravity value computed on the
 AE6392.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AE6392.degrees latitude (g = 980.6199 gals.).

AE6392.The modeled gravity was interpolated from observed gravity values.

AE6392;

	North	East	Units	Scale	Factor	Converg.
AE6392;SPC FL E	- 310,599.174	181,748.129	MT	0.99994529	-0 05 02.3	
AE6392;UTM 17	- 3,001,625.181	481,754.356	MT	0.99960411	-0 05 02.3	

AE6392!
 AE6392!SPC FL E - Elev Factor x Scale Factor = Combined Factor
 AE6392!UTM 17 - 1.00000215 x 0.99994529 = 0.99994744
 AE6392!UTM 17 - 1.00000215 x 0.99960411 = 0.99960626

AE6392
 AE6392 SUPERSEDED SURVEY CONTROL

AE6392 NAD 83(1990)- 27 08 13.27723(N) 081 11 02.84324(W) AD() 1
 AE6392 ELLIP H (05/30/00) -13.70 (m) GP() 3 2
 AE6392 NAVD 88 (05/30/00) 11.55 (m) 37.9 (f) LEVELING 3

AE6392
 AE6392.Superseded values are not recommended for survey control.
 AE6392.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AE6392.[See file dsdata.txt](#) to determine how the superseded data were derived.

AE6392
 AE6392_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML8175401625(NAD 83)
 AE6392_MARKER: I = METAL ROD
 AE6392_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

AE6392_STAMPING: J 437 1995
 AE6392_MARK LOGO: NGS
 AE6392_PROJECTION: FLUSH
 AE6392_MAGNETIC: N = NO MAGNETIC MATERIAL
 AE6392_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AE6392_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AE6392+SATELLITE: SATELLITE OBSERVATIONS - July 13, 1999
 AE6392_ROD/PIPE-DEPTH: 24.4 meters

AE6392	HISTORY	- Date	Condition	Report By
AE6392	HISTORY	- 1995	MONUMENTED	FLDEP
AE6392	HISTORY	- 19990713	GOOD	BAH

AE6392
 AE6392 STATION DESCRIPTION

AE6392 DESCRIBED BY FL DEPT OF ENV PRO 1995 (LGB)
 AE6392 THE MARK IS ABOUT 15.0 MI (24.1 KM) SOUTHEAST OF LAKE PLACID, 12.1 MI
 AE6392 (19.5 KM) NORTHWEST OF LAKEPORT IN SECTION 25, TOWNSHIP 38 SOUTH,
 AE6392 RANGE 31 EAST. TO REACH THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY
 AE6392 27 AND STATE ROAD 70 SOUTH OF LAKE PLACID, GO EAST ON STATE ROAD 70
 AE6392 FOR 7.7 MI (12.4 KM) TO THE WEST END OF THE BRIDGE OVER CANAL C 41
 AE6392 (HARNEY POND CANAL), TURN RIGHT AT THE WEST END OF BRIDGE, PASSING
 AE6392 THROUGH THE GATE, GO SOUTH ON THE LEVEE ROAD FOR 1.05 MI (1.69 KM) TO
 AE6392 A SHARP CURVE TO THE RIGHT, CONTINUE WEST ON THE LEVEE ROAD FOR 1.85
 AE6392 MI (2.98 KM) TO A CURVE TO THE LEFT, CONTINUE SOUTH ON THE LEVEE ROAD
 AE6392 FOR 2.1 MI (3.4 KM) TO A CURVE TO THE LEFT, CONTINUE SOUTHEAST ON THE
 AE6392 LEVEE ROAD FOR 2.7 MI (4.3 KM) TO ANOTHER CURVE TO THE LEFT, CONTINUE
 AE6392 EAST ON THE LEVEE ROAD FOR 1.1 MI (1.8 KM) TO A PAIR OF 5.0 FT (1.5 M)
 AE6392 DIAMETER CULVERTS, A GATE, AND THE MARK JUST EAST OF THE GATE ON THE
 AE6392 RIGHT, A STAINLESS STEEL ROD DRIVEN TO THE DEPTH OF 80.0 FT (24.4 M)
 AE6392 RECESSED 0.4 FT (12.2 CM) WITH A LOGO CAP FLUSH WITH THE GROUND.
 AE6392 LOCATED 118.0 FT (36.0 M) SOUTH OF THE TOP SCARP OF CANAL C 41, 90.0
 AE6392 FT (27.4 M) NORTH OF A FENCE LINE, 6.0 FT (1.8 M) EAST OF THE SOUTH
 AE6392 GATE POST AND 2.5 FT (0.8 M) EAST OF A CARSONITE WITNESS POST. NOTE
 AE6392 ACCESS TO DATUM POINT IS HAD THROUGH A 5-INCH LOGO CAP. NOTE ALL GATES
 AE6392 ON LEVEE ARE LOCKED, FOR KEY CONTACT CARL ZEISS, SOUTH FLORIDA WATER
 AE6392 MANAGEMENT DISTRICT, WEST PALM BEACH, FL. PHONE NUMBER (407)
 AE6392 686-8800.

AE6392
 AE6392 STATION RECOVERY (1999)

AE6392 RECOVERY NOTE BY BERRYMAN & HENIGAR 1999 (BH)
 AE6392 RECOVERED AS DESCRIBED.

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

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

West Side Bench Runs

Forward Run #1

Reverse Run #2

Preliminary Preliminary

Plus	HI	Minus	Elevation	Benchmark Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Plus	HI	Minus	Elevation	Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Mean Delta	Adjusted Elevation (meters)	Prorated Elevation Adjustment	Benchmark Description
1.5769	10.9719		9.3950	H-437				1.5290	9.5759		8.0469	Buck 1A					8.0469	8.0479	Buck 1A
1.2373	10.2816	1.9276	9.0443					1.6929	10.5401	0.7287	8.8472								
1.4202	10.2451	1.4567	8.8249					1.1648	9.8373	1.8676	8.6725								
1.9284	10.2106	1.9629	8.2822					1.2641	10.1098	0.9916	8.8457								
1.4947	10.3185	1.3868	8.8238					1.6112	10.6170	1.1040	9.0058								
1.4255	10.4332	1.3108	9.0077					1.2763	10.4593	1.4340	9.1830								
1.6000	10.3754	1.6578	8.7754					1.6381	10.7007	1.3967	9.0626								
1.4450	10.3749	1.4455	8.9299					1.3182	10.4256	1.5933	9.1074								
1.3653	10.2412	1.4990	8.8759					1.4297	10.3343	1.5210	8.9046								
1.3029	10.4064	1.1377	9.1035					1.2983	10.3796	1.2530	9.0813								
1.4358	10.4914	1.3508	9.0556					1.6185	10.5848	1.4133	8.9663								
1.4350	10.5093	1.4171	9.0743					1.4891	10.5131	1.5608	9.0240								
1.3662	10.3915	1.4840	9.0253					1.5914	10.4590	1.6455	8.8676								
1.8000	10.5282	1.6633	8.7282					1.2818	10.3154	1.4254	9.0336								
1.5585	10.6713	1.4154	9.1128					1.4516	10.2345	1.5325	8.7829								
1.3980	10.6202	1.4491	9.2222					1.5334	10.3955	1.3724	8.8621								
1.8185	10.6895	1.7492	8.8710					1.4060	10.3779	1.4236	8.9719								
1.2979	10.2080	1.7794	8.9101					1.5885	10.5146	1.4518	8.9261								
1.2827	9.8445	1.6462	8.5618					1.4112	10.3117	1.6141	8.9005								
1.0878	10.0836	0.8487	8.9958					1.2958	10.3217	1.2895	9.0222								
1.5901	9.8335	1.8402	8.2434					1.5650	10.9147	0.9720	9.3497								
1.5609	9.5286	1.8658	7.9677					1.6021	11.1659	1.3509	9.5638								
		1.4837	8.0449	Buck 1A	32.4276	33.7777	-1.3501			1.7713	9.3946	H-437	32.0607	30.713	1.3477	1.3489			
1.6026	9.6475		8.0449	Buck 1A				1.5308	9.5124		7.9816	Buck 2A					7.98255	7.9839	Buck 2A
1.4547	9.6357	1.4665	8.1810					1.6312	9.8526	1.2910	8.2214								
1.5586	9.8827	1.3116	8.3241					1.4845	9.9331	1.4040	8.4486								
1.4750	9.8521	1.5056	8.3771					1.4619	10.0354	1.3596	8.5735								
1.4788	9.7537	1.5772	8.2749					1.5758	10.0207	1.5905	8.4449								
1.4061	9.6808	1.4790	8.2747					1.4685	9.6838	1.8054	8.2153								
1.3335	9.4576	1.5567	8.1241					1.5098	9.7072	1.4864	8.1974								
1.5206	9.4590	1.5192	7.9384					1.4091	9.6185	1.4978	8.2094								
		1.4775	7.9815	Buck 2A	11.8299	11.8933	-0.0634			1.5716	8.0469	Buck 1A	12.0716	12.0063	0.0653	0.06435			
1.4975	9.4790		7.9815	Buck 2A				1.2116	9.4564		8.2448	Buck 3B					8.2455	8.2470	Buck 3B
1.4772	9.5316	1.4246	8.0544					1.4400	9.5453	1.3511	8.1053								
1.5121	9.5761	1.4676	8.0640					1.6740	9.6000	1.6193	7.9260								
1.5604	9.7000	1.4365	8.1396					1.1349	9.4657	1.2692	8.3308								
		1.4558	8.2442	Buck 3B	6.0472	5.7845	0.2627			1.4841	7.9816	Buck 2A	5.4605	5.7237	-0.2632	-0.26295			
1.4879	9.7321		8.2442	Buck 3B				1.6343	9.8822		8.2479	Buck 4A					8.248	8.2497	Buck 4A
1.4041	9.9134	1.2228	8.5093					1.5949	9.9508	1.5263	8.3559								
1.4722	9.8024	1.5832	8.3302					1.5594	9.9624	1.5478	8.4030								
1.4825	9.8099	1.4750	8.3274					1.2978	9.7127	1.5475	8.4149								
		1.5638	8.2461	Buck 4A	5.8467	5.8448	0.0019			1.4679	8.2448	Buck 3B	6.0864	6.0895	-0.0031	-0.0025			
1.7678	10.0139		8.2461	Buck 4A				1.8997	10.1476		8.2479	Buck 4A							
1.4169	9.6490	1.7818	8.2321					1.9971	10.2401	1.9046	8.2430								
1.1706	9.6231	1.1965	8.4525					1.4298	9.6335	2.0364	8.2037								
1.5580	9.6904	1.4907	8.1324					1.4292	9.6045	1.4582	8.1753								
1.4653	9.7145	1.4412	8.2492					1.4951	9.7084	1.3912	8.2133								
1.4034	9.6725	1.4454	8.2691					1.4795	9.7894	1.3985	8.3099								
		1.3634	8.3091	Buck 5B	8.7820	8.7190	0.0630			1.4787	8.3107	Buck 5B	9.7304	9.6676	0.0628	0.0629	8.3109	8.3129	Buck 5B

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

Plus	HI	Minus	Elevation	Benchmark Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Plus	HI	Minus	Elevation	Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Mean Delta	Adjusted Elevation (meters)	Prorated Elevation Adjustment	Benchmark Description
1.3852	9.6943		8.3091	Buck 5B				1.5646	9.6835		8.1189	Buck 6A					8.1187	8.1209	Buck 6A
1.5208	9.7372	1.4779	8.2164					1.4111	9.7320	1.3626	8.3209								
1.5257	9.6598	1.6031	8.1341					1.3968	9.6907	1.4381	8.2939								
1.5919	9.6750	1.5767	8.0831					1.4174	9.7126	1.3955	8.2952								
		1.5585	8.1165	Buck 6A	6.0236	6.2162	-0.1926			1.4019	8.3107	Buck 5B	5.7899	5.5981	0.1918	0.1922			
								1.5887	9.7312		8.1425	Buck 8A					8.14155	8.1440	Buck 8A
1.6317	9.7482		8.1165	Buck 6A				1.3058	9.5511	1.4859	8.2453								
1.4351	9.6364	1.5469	8.2013					1.6044	9.7062	1.4493	8.1018								
1.4827	9.6109	1.5082	8.1282					1.3667	9.6462	1.4267	8.2795								
1.4376	9.5918	1.4567	8.1542					1.4273	9.7208	1.3527	8.2935								
		1.4532	8.1386	Buck 8A	5.9871	5.9650	0.0221	1.4462	9.6843	1.4827	8.2381								
										1.5654	8.1189	Buck 6A	8.7391	8.7627	-0.0236	-0.02285			
1.3758	9.5144		8.1386	Buck 8A				1.4994	9.6103		8.1109	Buck 9B					8.10865	8.1114	Buck 9B
1.5503	9.5724	1.4923	8.0221					1.5640	9.6830	1.4913	8.1190								
1.0713	9.6368	1.0069	8.5655					1.4371	9.6004	1.5197	8.1633								
1.4559	9.6916	1.4011	8.2357					1.6971	9.6475	1.6500	7.9504								
1.3825	9.5313	1.5428	8.1488					0.9355	9.5707	1.0123	8.6352								
1.4845	9.5301	1.4857	8.0456					1.2466	9.3390	1.4783	8.0924								
1.6291	9.7701	1.3891	8.1410							1.1965	8.1425	Buck 8A	8.3797	8.3481	0.0316	0.0329			
1.5410	9.6333	1.6778	8.0923																
		1.5289	8.1044	Buck 9B	11.4904	11.5246	-0.0342												
1.5075	9.6119		8.1044	Buck 9B				2.0806	10.0293		7.9487	Buck 10A					7.9461	7.9490	Buck 10A
1.3061	9.5092	1.4088	8.2031					1.3675	9.5893	1.8075	8.2218								
1.6681	9.4778	1.6995	7.8097					1.5019	9.5761	1.5151	8.0742								
1.6949	9.5309	1.6418	7.8360					1.3489	9.5642	1.3608	8.2153								
		1.5894	7.9415	Buck 10A	6.1766	6.3395	-0.1629			1.4533	8.1109	Buck 9B	6.2989	6.1367	0.1622	0.16255			
1.5843	9.5258		7.9415	Buck 10A				1.3549	9.3894		8.0345	Buck 11B					8.03075	8.0340	Buck 11B
1.4540	9.5784	1.4014	8.1244					1.3880	9.4430	1.3344	8.0550								
1.4155	9.4682	1.5257	8.0527					1.4131	9.5210	1.3351	8.1079								
1.3800	9.5978	1.2504	8.2178					1.5197	9.6189	1.4218	8.0992								
1.4729	9.4851	1.5856	8.0122					1.4410	9.5470	1.5129	8.1060								
1.1798	9.2667	1.3982	8.0869					1.4633	9.5983	1.4120	8.1350								
		1.2417	8.0250	Buck 11B	8.4865	8.4030	0.0835	1.4779	9.6110	1.4652	8.1331								
								1.4363	9.4476	1.5997	8.0113								
										1.4989	7.9487	Buck 10A	11.4942	11.58	-0.0858	-0.08465			
1.5778	9.6028		8.0250	Buck 11B				1.5857	10.9807		9.3950	H-437					9.3913	9.3950	H-437
1.6708	10.3053	0.9683	8.6345					1.1452	10.3988	1.7271	9.2536								
1.4559	10.1500	1.6112	8.6941					1.2592	10.1930	1.4650	8.9338								
1.2135	10.0147	1.3488	8.8012					1.5455	10.3269	1.4116	8.7814								
1.3837	10.2113	1.1871	8.8276					1.4370	10.1415	1.6224	8.7045								
1.2700	10.0314	1.4499	8.7614					1.7494	10.1537	1.7372	8.4043								
1.3796	10.1104	1.3006	8.7308					1.4437	9.9914	1.6060	8.5477								
1.2350	10.0850	1.2604	8.8500					1.3080	9.7107	1.5887	8.4027								
1.7861	10.3916	1.4795	8.6055					1.5859	9.6785	1.6181	8.0926								
1.5440	10.3077	1.6279	8.7637					1.3894	9.5304	1.5375	8.1410								
1.4888	10.1134	1.6831	8.6246							1.4959	8.0345	Buck 11B	14.449	15.8095	-1.3605	-1.36055			
1.4763	10.2948	1.2949	8.8185																
2.0240	10.6456	1.6732	8.6216																
1.6362	11.0869	1.1949	9.4507																
		1.7013	9.3856	H-437	21.1417	19.7811	1.3606												
1.6157	11.0107		9.3950	H-437				1.4494	9.7318		8.2824	Buck 7B					8.28275	8.2828	Buck 7B
0.9892	10.1507	1.8492	9.1615					1.2762	9.7976	1.2104	8.5214								
1.1855	9.8518	1.4844	8.6663					1.5941	10.1972	1.1945	8.6031								
1.2020	9.7236	1.3302	8.5216					1.8115	10.9892	1.0195	9.1777								
		1.4412	8.2824	Buck 7B	4.9924	6.1050	-1.1126			1.5949	9.3943	H-437	6.1312	5.0193	1.1119	1.11225			

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

East Side Bench Runs																				
Foreward Run #1									Reverse Run #2						Preliminary			Preliminary		
Plus	HI	Minus	Elevation	Benchmark Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Plus	HI	Minus	Elevation	Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Mean Delta	Adjusted Elevation (meters)	Prorated Elevation Adjustment	Benchmark Description	
0.9432	12.4982		11.5550	J-437				1.9986	9.8717		7.8731	Buck 20A								
1.3173	11.0350	2.7805	9.7177					1.5150	9.3642	2.0225	7.8492									
1.2316	9.8580	2.4086	8.6264					2.9798	11.6494	0.6946	8.6696									
2.3465	10.9722	1.2323	8.6257					1.4440	9.8614	3.2320	8.4174									
1.7698	10.3788	2.3632	8.6090					2.8779	12.3977	0.3416	9.5198									
1.3100	9.2574	2.4314	7.9474					1.6664	13.4310	0.6331	11.7646									
		1.3872	7.8702	Buck 20A	8.9184	12.6032	-3.6848			1.8767	11.5543	J-437	12.4817	8.8005	3.6812	3.683	11.55985	11.5550	J-437	
1.9430	9.8132		7.8702	Buck 20A				1.4105	9.4864		8.0759	Buck 12B								
1.8603	9.4222	2.2513	7.5619					2.0659	9.7420	1.8103	7.6761									
1.5142	9.4850	1.4514	7.9708					1.4043	9.7940	1.3523	8.3897									
1.4106	9.5257	1.3699	8.1151					1.2964	9.8695	1.2209	8.5731									
1.6551	9.7508	1.4300	8.0957					1.3240	9.8208	1.3727	8.4968									
1.3601	9.5419	1.5690	8.1818					1.3201	9.8779	1.2630	8.5578									
1.4092	9.5751	1.3760	8.1659					1.4787	9.9123	1.4443	8.4336									
1.3745	9.4837	1.4659	8.1092					1.4935	9.8331	1.5727	8.3396									
		1.4120	8.0717	Buck 12B	12.5270	12.3255	0.2015	1.3980	9.7105	1.5206	8.3125									
								1.0214	9.4757	1.2562	8.4543									
										1.6026	7.8731	Buck 20A	14.2128	14.4156	-0.2028	-0.20215	7.87685	7.8725	Buck 20A	
1.5000	9.5717		8.0717	Buck 12B				1.5960	9.4309		7.8349	Buck 13A								
1.6934	9.4443	1.8208	7.7509					1.3913	9.3609	1.4613	7.9696									
1.5228	9.5503	1.4168	8.0275					1.5033	9.4892	1.3750	7.9859									
1.4841	9.4715	1.5629	7.9874					1.4601	9.5350	1.4143	8.0749									
		1.6424	7.8291	Buck 13A	6.2003	6.4429	-0.2426			1.4591	8.0759	Buck 12B	5.9507	5.7097	0.241	0.2418	8.079	8.0754	Buck 12B	
1.7948	9.6239		7.8291	Buck 13A				1.5509	9.4585		7.9076	Buck 14B								
1.4983	9.4595	1.6627	7.9612					1.9861	9.6285	1.8161	7.6424									
		1.5574	7.9021	Buck 14B	3.2931	3.2201	0.0730			1.7936	7.8349	Buck 13A	3.537	3.6097	-0.0727	-0.07285	7.8372	7.8339	Buck 13A	
1.5392	9.4413		7.9021	Buck 14B				1.5528	9.4298		7.8770	Buck 15A								
1.6278	9.4424	1.6267	7.8146					1.4583	9.4860	1.4021	8.0277									
		1.5717	7.8707	Buck 15A	3.1670	3.1984	-0.0314			1.5784	7.9076	Buck 14B	3.0111	2.9805	0.0306	0.031	7.91005	7.9069	Buck 14B	
1.5848	9.4555		7.8707	Buck 15A				1.4814	9.4556		7.9742	Buck 16B								
0.8872	9.4610	0.8817	8.5738					1.7663	9.7838	1.4381	8.0175									
1.4545	9.4376	1.4779	7.9831					1.4105	9.3790	1.8153	7.9685									
		1.4707	7.9669	Buck 16B	3.9265	3.8303	0.0962	1.4276	9.4175	1.3891	7.9899									
										1.5405	7.8770	Buck 15A	6.0858	6.183	-0.0972	-0.0967	7.87905	7.8761	Buck 15A	
1.4462	9.4131		7.9669	Buck 16B				1.6125	9.4649		7.8524	Buck 17A								
1.6787	9.4573	1.6345	7.7786					1.3993	9.4322	1.4320	8.0329									
		1.6114	7.8459	Buck 17A	3.1249	3.2459	-0.1210			1.4580	7.9742	Buck 16B	3.0118	2.89	0.1218	0.1214	7.97575	7.9731	Buck 16B	
1.6085	9.4544		7.8459	Buck 17A				1.5574	9.5152		7.9578	Buck 18B								
1.5033	9.5050	1.4527	8.0017					1.4904	9.4713	1.5343	7.9809									
		1.5548	7.9502	Buck 18B	3.1118	3.0075	0.1043			1.6189	7.8524	Buck 17A	3.0478	3.1532	-0.1054	-0.10485	7.85435	7.8518	Buck 17A	
1.4811	9.4313		7.9502	Buck 18B				1.6693	9.6490		7.9797	Buck 19A								
1.8287	9.9701	1.2899	8.1414					1.1914	9.4936	1.3468	8.3022									
1.5083	9.6509	1.8275	8.1426							1.5358	7.9578	Buck 18B	2.8607	2.8826	-0.0219	-0.02055	7.9592	7.9569	Buck 18B	
		1.6815	7.9694	Buck 19A	4.8181	4.7989	0.0192													

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

Plus	HI	Minus	Elevation	Benchmark Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Plus	HI	Minus	Elevation	Description	Sum of "Plus" Column	Sum of "Minus" Column	Delta = Difference in Elevation	Mean Delta	Adjusted Elevation (meters)	Prorated Elevation Adjustment	Benchmark Description
1.6394	9.6088		7.9694	Buck 19A				1.9151	9.8872		7.9721	Buck 22B							
1.4109	9.6314	1.3883	8.2205					1.9112	9.9174	1.8810	8.0062								
1.3867	9.5068	1.5113	8.1201					1.4913	9.8750	1.5337	8.3837								
1.5512	9.6179	1.4401	8.0667					1.3551	9.8051	1.4250	8.4500								
1.8902	9.9212	1.5869	8.0310					1.5823	9.8941	1.4933	8.3118								
1.6636	9.7215	1.8633	8.0579					1.3200	9.6218	1.5923	8.3018								
		1.7591	7.9624	Buck 22B	9.5420	9.5490	-0.0070			1.6421	7.9797	Buck 19A	9.575	9.5674	0.0076	0.0073	7.97975	7.9776	Buck 19A
1.8973	9.8597		7.9624	Buck 22B				2.0585	9.8161		7.7576	Buck 21A							
1.5705	9.7389	1.6913	8.1684					1.4509	9.6525	1.6145	8.2016								
1.4919	9.4512	1.7796	7.9593					1.6103	9.6259	1.6369	8.0156								
1.4377	9.5509	1.3380	8.1132					1.4082	9.5472	1.4869	8.1390								
1.7685	9.7568	1.5626	7.9883					1.5949	9.6252	1.5169	8.0303								
1.1950	9.4128	1.5390	8.2178					1.4346	9.7306	1.3292	8.2960								
		1.6649	7.7479	Buck 21A	9.3609	9.5754	-0.2145	1.0665	9.4916	1.3055	8.4251								
								1.4202	9.3873	1.5245	7.9671								
										1.4152	7.9721	Buck 22B	12.0441	11.8296	0.2145	0.2145	7.97245	7.9707	Buck 22B
1.6015	9.3494		7.7479	Buck 21A				1.2360	12.7910		11.5550	J-437					11.555		
1.3305	9.3566	1.3233	8.0261					1.1291	12.5386	1.3815	11.4095								
1.7334	9.6698	1.4202	7.9364					1.2447	12.2862	1.4971	11.0415								
1.7039	9.6545	1.7192	7.9506					1.6178	12.4240	1.4800	10.8062								
1.6311	9.5663	1.7193	7.9352					1.2294	12.8978	0.7556	11.6684								
1.5721	9.7729	1.3655	8.2008					1.4177	13.0188	1.2967	11.6011								
1.5992	9.7704	1.6017	8.1712					1.5680	12.8936	1.6932	11.3256								
1.6002	9.8496	1.5210	8.2494					0.6027	11.2540	2.2423	10.6513								
1.6236	9.7572	1.7160	8.1336					1.3210	10.3158	2.2592	8.9948								
2.5383	10.8480	1.4475	8.3097					1.3232	10.4815	1.1575	9.1583								
1.1523	11.1014	0.8989	9.9491					0.9842	9.3059	2.1598	8.3217								
1.1276	9.6786	2.5504	8.5510					1.4235	9.3712	1.3582	7.9477								
2.7434	11.3156	1.1064	8.5722					1.7020	9.3506	1.7226	7.6486								
2.2914	13.0662	0.5408	10.7748					1.6132	9.5637	1.4001	7.9505								
		1.5216	11.5446	J-437	24.2485	20.4518	3.7967			1.8061	7.7576	Buck 21A	18.4125	22.2099	-3.7974	-3.79705	7.75795	7.7569	Buck 21A

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

Subordinate Bench Runs																			
Plus	HI	Minus	Elevation	Benchmark Description	Delta = Difference in Elevation	Mean Delta	Preliminary Adjusted Elevation	Benchmark Description			Plus	HI	Minus	Elevation	Benchmark Description	Delta = Difference in Elevation	Mean Delta	Preliminary Adjusted Elevation	Benchmark Description
1.6484	9.4823		7.8339	Buck 13A						1.5924	9.4993		7.9069	Buck 14B					
		0.6309	8.8514	Buck 13C	1.0175								0.6432	8.8561	Buck 14C	0.9492			
0.6310	9.4824		8.8514	Buck 13C						0.6432	9.4993		8.8561	Buck 14C					
		1.6486	7.8338	Buck 13A	-1.0176	1.0176	8.8515	Buck 13C					1.5924	7.9069	Buck 14B	-0.9492	0.9492	8.8561	Buck 14C
1.4950	9.3711		7.8761	Buck 15A						1.5014	9.3775		7.8761	Buck 15A					
		1.4543	7.9168	Buck 15B	0.0407								0.6178	8.7597	Buck 15C	0.8836			
1.4541	9.3709		7.9168	Buck 15B						0.6176	9.3773		8.7597	Buck 15C					
		1.4950	7.8759	Buck 15A	-0.0409	0.0408	7.9169	Buck 15B					1.5015	7.8758	Buck 15A	-0.8839	0.88375	8.7598	Buck 15C
1.4968	9.4699		7.9731	Buck 16B						1.6031	9.5600		7.9569	Buck 18B					
		0.6344	8.8355	Buck 16C	0.8624								0.6598	8.9002	Buck 18C	0.9433			
0.6344	9.4699		8.8355	Buck 16C						0.6585	9.5587		8.9002	Buck 18C					
		1.4969	7.9730	Buck 16B	-0.8625	0.8625	8.8355	Buck 16C					1.6019	7.9568	Buck 18B	-0.9434	0.94335	8.9002	Buck 18C
1.5298	9.3816		7.8518	Buck 17A						1.5299	9.4060		7.8761	Buck 17A					
		1.4450	7.9366	Buck 17B	0.0848								0.5377	8.8683	Buck 17C	0.9922			
1.4461	9.3827		7.9366	Buck 17B						0.5378	9.4061		8.8683	Buck 17C					
		1.5300	7.8527	Buck 17A	-0.0839	0.0844	7.9362	Buck 17B					1.5296	7.8765	Buck 17A	-0.9918	0.992	8.8681	Buck 17C
1.4539	9.5293		8.0754	Buck 12B						1.4625	9.4332		7.9707	Buck 22B					
		0.5987	8.9306	Buck 12C	0.8552								0.4901	8.9431	Buck 22C	0.9724			
0.6001	9.5307		8.9306	Buck 12C						0.4924	9.4355		8.9431	Buck 22C					
		1.4559	8.0748	Buck 12B	-0.8558	0.8555	8.9309	Buck 12C					1.4650	7.9705	Buck 22B	-0.9726	0.9725	8.9432	Buck 22C
1.5261	9.5037		7.9776	Buck 19A						1.5237	9.5013		7.9776	Buck 19A					
		1.3454	8.1583	Buck 19B	0.1807								0.532	8.9693	Buck 19C	0.9917			
1.3431	9.5014		8.1583	Buck 19B						0.5324	9.5017		8.9693	Buck 19C					
		1.5236	7.9778	Buck 19A	-0.1805	0.1806	8.1582	Buck 19B					1.5234	7.9783	Buck 19A	-0.991	0.99135	8.9689	Buck 19C
1.6168	9.3737		7.7569	Buck 21A						1.6190	9.3759		7.7569	Buck 21A					
		1.5146	7.8591	Buck 21B	0.1022								0.5827	8.7932	Buck 21C	1.0363			
1.5183	9.3774		7.8591	Buck 21B						0.5806	9.3738		8.7932	Buck 21C					
		1.6206	7.7568	Buck 21A	-0.1023	0.1023	7.8591	Buck 21B					1.6166	7.7572	Buck 21A	-1.036	1.03615	8.7930	Buck 21C
1.4749	9.3474		7.8725	Buck 20A						1.4775	9.3500		7.8725	Buck 20A					
		1.4620	7.8854	Buck 20B	0.0129								0.4893	8.8607	Buck 20C	0.9882			
1.4647	9.3501		7.8854	Buck 20B						0.4859	9.3466		8.8607	Buck 20C					
		1.4775	7.8726	Buck 20A	-0.0128	0.0129	7.8853	Buck 20B					1.4744	7.8722	Buck 20A	-0.9885	0.98835	8.8608	Buck 20C
1.5426	9.5905		8.0479	Buck 1A						1.5400	9.5879		8.0479	Buck 1A					
		1.4994	8.0911	Buck 1B	0.0432								0.5966	8.9913	Buck 1C	0.9434			
1.4973	9.5884		8.0911	Buck 1B						0.6008	9.5921		8.9913	Buck 1C					
		1.5408	8.0476	Buck 1A	-0.0435	0.0433	8.0912	Buck 1B					1.5442	8.0479	Buck 1A	-0.9434	0.9434	8.9913	Buck 1C
1.5526	9.5365		7.9839	Buck 2A						1.5520	9.5359		7.9839	Buck 2A					
		1.4119	8.1246	Buck 2B	0.1407								0.5536	8.9823	Buck 2C	0.9984			
1.4106	9.5352		8.1246	Buck 2B						0.5974	9.5797		8.9823	Buck 2C					
		1.5495	7.9857	Buck 2A	-0.1389	0.1398	8.1237	Buck 2B					1.5945	7.9852	Buck 2A	-0.9971	0.99775	8.9817	Buck 2C

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

Subordinate Bench Runs

Plus	HI	Minus	Elevation	Benchmark Description	Delta = Difference in Elevation	Mean Delta	Preliminary Adjusted Elevation	Benchmark Description	Plus	HI	Minus	Elevation	Benchmark Description	Delta = Difference in Elevation	Mean Delta	Preliminary Adjusted Elevation	Benchmark Description
1.4742	9.7212		8.2470	Buck 3B					1.4047	9.7176		8.3129	Buck 5B				
		0.6842	9.0370	Buck 3C	0.7900						0.5447	9.1729	Buck 5C	0.86			
0.6855	9.7225		9.0370	Buck 3C					0.4953	9.6682		9.1729	Buck 5C				
		1.4740	8.2485	Buck 3B	-0.7885	0.7893	9.0363	Buck 3C			1.3549	8.3133	Buck 5B	-0.8596	0.8598	9.1727	Buck 5C
1.5430	9.7927		8.2497	Buck 4A					1.5457	9.7954		8.2497	Buck 4A				
		1.4687	8.3240	Buck 4B	0.0743						0.5753	9.2201	Buck 4C	0.9704			
1.4713	9.7953		8.3240	Buck 4B					0.5754	9.7955		9.2201	Buck 4C				
		1.5458	8.2495	Buck 4A	-0.0745	0.0744	8.3241	Buck 4B			1.5456	8.2499	Buck 4A	-0.9702	0.9703	9.2200	Buck 4C
1.5171	9.6380		8.1209	Buck 6A					1.5095	9.6304		8.1209	Buck 6A				
		1.3944	8.2436	Buck 6B	0.1227						0.4809	9.1495	Buck 6C	1.0286			
1.3862	9.6298		8.2436	Buck 6B					0.4782	9.6277		9.1495	Buck 6C				
		1.5091	8.1207	Buck 6A	-0.1229	0.1228	8.2437	Buck 6B			1.5062	8.1215	Buck 6A	-1.028	1.0283	9.1492	Buck 6C
1.4219	9.4559		8.0340	Buck 11B					1.4762	9.5876		8.1114	Buck 9B				
		0.5336	8.9223	Buck 11C	0.8883						0.6243	8.9633	Buck 9C	0.8519			
0.5364	9.4587		8.9223	Buck 11C					0.6285	9.5918		8.9633	Buck 9C				
		1.4240	8.0347	Buck 11B	-0.8876	0.8880	8.9219	Buck 11C			1.4802	8.1116	Buck 9B	-0.8517	0.8518	8.9632	Buck 9C
1.7537	9.7027		7.9490	Buck 10A					1.7556	9.7046		7.9490	Buck 10A				
		1.6537	8.0490	Buck 10B	0.1000						0.8109	8.8937	Buck 10C	0.9447			
1.6553	9.7043		8.0490	Buck 10B					0.808	9.7017		8.8937	Buck 10C				
		1.7548	7.9495	Buck 10A	-0.0995	0.0998	8.0487	Buck 10B			1.7521	7.9496	Buck 10A	-0.9441	0.9444	8.8934	Buck 10C
1.5719	9.7159		8.1440	Buck 8A					1.5690	9.7130		8.1440	Buck 8A				
		1.4423	8.2736	Buck 8B	0.1296						0.6185	9.0945	Buck 8C	0.9505			
1.4388	9.7124		8.2736	Buck 8B					0.618	9.7125		9.0945	Buck 8C				
		1.5691	8.1433	Buck 8A	-0.1303	0.1300	8.2739	Buck 8B			1.5686	8.1439	Buck 8A	-0.9506	0.95055	9.0945	Buck 8C
1.5024	9.7852		8.2828	Buck 7B													
		0.6280	9.1572	Buck 7C	0.8744												
0.6249	9.7821		9.1572	Buck 7C													
		1.5006	8.2815	Buck 7B	-0.8757	0.8751	9.1578	Buck 7C									

Office

Project

15 May 2017

INPUT

Geographic, flhpgn - Florida HPGN
Vertical - NAVD88, U.S. Feet

OUTPUT

State Plane, flhpgn - Florida HPGN
0901 - Florida East, U.S. Feet
Vertical - NGVD29 (Custom), U.S. Feet

BUCK05B

1/1

Latitude: 27 07 55
Longitude: 81 12 28
Elevation/Z: 0

Northing/Y: 1017190.452
Easting/X: 588589.206
Elevation/Z: 1.220
Convergence: -0 05 41.11999
Scale Factor: 0.999946412
Combined Factor: 0.999950302

Remark:

Corpscon v6.0.1, U.S. Army Corps of Engineers

DBHYDRO | by station

STATION INFORMATION

Station	BUCK05_G
Site	BUCK05
Type	WELL
Latitude (ddmmss.sss)	270755.488
Longitude (ddmmss.sss)	811228.111
X Coord (ft) NAD83	588578
Y Coord (ft) NAD83	1017240
County	Highlands
Basin	C-41N
Section	34
Township	38
Range	31
Show Map	Google Map
Well Info	Info
Description	Middle of unimproved pasture W4 at Buck Island Ranch S of Harney pond canal
Notes	Description provided by Odi Villapando
Nearby Stations	Nearby Stations
Attachments	None Available

Query returned 1 station record(s).

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