



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

Description: **Monitoring Well "BUCK 02"**

Date: June 17, 2005

Location: Buck Island Ranch, Highlands County, Florida

Project Results

Benchmarks established:

1. **"BUCK 02A"**: 3" bronze survey disk set in concrete monument
 - a. Elevation: **7.9839 m**
2. **"BUCK 02B"**: Top of existing 1.5" steel pipe
 - a. Elevation: **8.1237 m**
3. **"BUCK 02C"**: Top of existing 3" PVC monitoring well casing
 - a. Elevation: **8.9817 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 02A"** N = **1017079** E = **585397**

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:

BUCK02



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

BUCK02A



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

BUCK02B



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

BUCK02C



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

153

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)
5/18/5				

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)
17	BK3	—	1130	1	86°	

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 #
16	BK2	BK2A"2005"	1230	1	87°	0/1

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

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
3	230.9	-0.1	-0.2632

CLOSURE	REMARKS
F	
B	
DIF	
ALW'D	

05
3
15

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)
5/18/5				

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
16	BKX 2	BKX 2A '2005'	1240	1	88°	

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 #
15	BKX 1	BKX 1-A '2005'	1350	1	88°	1/2

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

TOTAL SETUPS	TOTAL DISTANCE (d)	ACCUMULATED (MB (d))	ELEV DIFFERENCE (GROUN'D HGT)
7	644.87	-3.85	+0.0651

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)

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	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)
04.28.05	1	SR		179

CODE 2 - EQUIPMENT USED

INFO 1 - INST SERIAL #	INFO 2 - INST COLLIMATION	ROD CODE	INFO 3 - ROD 1 SERIAL #	INFO 4 - ROD 2 SERIAL #
283470	+2.2	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 (S)
0015	BKK-1	BKK-1A	13:20 PM	1	79°	

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 =
0016	BKK-2	BKK-2A "2005"	14:43 PM	1	85°	0/2

SECTION OBSERVATIONS INFORMATION (Recall from level using U/P/D/N arrows)

TOTAL SETUPS	TOTAL DISTANCE (D)	ACCUMULATED IMB (d)	ELEV DIFFERENCE (GROUND HGT)
7	610.2	+0.3	+0.0432

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)

CREECHOREE MOUNT. WELLS

4/28/5

13

+	DIST	-	DIST DESC
1.8000	45.55	1.6633	45.33
1.5585	45.00	1.4154	45.73
1.3980	45.92	1.4491	44.96
1.8185	44.96	1.7492	46.00
1.2979	44.99	1.7794	45.13
1.2827	40.26	1.6462	49.92
1.0878	35.83	0.8487	40.13
1.5201	22.90	1.8402	36.19
1.5609	24.27	1.8658	23.03
END SECTION		1.4837	
1.6026	38.44		
1.4547	44.29	1.4665	38.33
1.5586	45.15	1.3116	44.96
1.4750	45.95	1.5056	45.08
1.48 4788	40.71	1.5712	45.51
1.4061	35.78	1.4790	40.73
1.3335	24.64	1.5567	35.63
1.5206	30.29	1.5192	24.62
END SECTION		1.4715	30.13

DESC	AT S. ROYER (B) ? D. ROE (A) ? D. PITCHER
TP-13	
TP-14	
TP-15	
TP-16	
TP-17	
TP-18	
TP-19	
TP-20	
TP-21	12:20 PM @ 81°
TP-22 BUCK-01-A	SSN 0015
BUCK-1A	SSN # 0015
TP-1	
TP-2	
TP-3	
TP-4	
TP-5	
TP-6	
TP-7	
TP-8 BUCK-2A	SSN # 0016

4/28/5

13

05.1236

CREEKREE MOUNT. WELLS

#	DIST		DIST DESC
1.8000	45.55	1.6633	45.33
1.5585	45.00	1.4154	45.73
1.3980	45.92	1.4491	44.92
1.8185	44.96	1.7492	46.00
1.2979	44.99	1.7794	45.13
1.2827	40.76	1.6482	49.92
1.0878	35.83	0.2487	40.13
1.5901	22.90	1.8402	36.19
1.5609	24.27	1.8058	23.02
END SECTION		1.4837	
1.6026	38.44		
1.4547	44.24	1.4665	38.35
1.5586	45.15	1.3116	44.96
1.4150	45.95	1.5056	45.08
1.42	40.71	1.5772	45.51
4788			
1.4261	35.78	1.4790	40.73
1.3335	24.64	1.5567	35.63
1.5206	30.29	1.5192	24.62
END SECTION		1.4715	30.23

DESC
TP-13T. S. ROYER
(B) P. D. ROE
(A) P. D. PITCHER

TP-14

TP-15

TP-16

TP-17

TP-18

TP-19

TP-20

TP-21

12.20 PM @ 81'

TP-22 BUCK 21-A SSN # 0015

BUCK-1A SSN # 0015

TP-1

TP-2

TP-3

TP-4

TP-5

TP-6

TP-7

TP-8 BUCK 2A SSN # 0016

35 VES
 QUESADA MATH W

4/2/15

4

#	DIST	-	DIST
151601	995		
17716	7195		
+1935	2007	9709323	4000
+37		2.0397	3197
#	DIST	-	DIST
14975	4192		
14772	4911	14246	4497
15121	1864	14676	4511
15604	1676	14365	1850
END SECTION		14553	1669
14879	3918		
14041	4957	17778	5922
14122	2269	15832	4966
14875	2231	14750	2261
END SECTION		15639	2210

DESC	TR. OR BUCK
ROCK A	(B) T.D. PPEL
ROCK A	(A) T.D. PPEL
ROCK E	
ROCK A B	
ROCK A	
DESC	TR. OR BUCK
BUCK 2-A	SSN# 0216
TP-1	
TP-2	
TP-3	
TP-4	BUCK-3-B SSN# 0217
BUCK-3-B	SSN# 0217
TP-1	
TP-2	
TP-3	
TP-4	BUCK 4-A SSN# 0218

+	DIST	-	DIST
1.3207	9.95		
1.7778	14.95		
1.1935	20.07	0.9303 40.07	
+ 3.9		2.0378	39.95
+	DIST	-	DIST
49.75	41.90		
1.4772	49.11	1.4046	44.97
1.5121	18.64	1.4676	46.11
1.5604	16.76	1.4305	18.52
END SECTION		1.4558	16.69
1.4879	39.18		
1.4041	49.57	1.2078	39.22
1.4772	22.69	1.5832	49.66
1.4825	22.37	1.4750	22.61
END SECTION		1.5638	22.10

DESC	SSN#
BUCK A	(B) TP-RE
BUCK A	(A) TP-PITCHER
BUCK A	
BUCK B	
BUCK A-B	
BUCK A	
DESC	SSN#
BUCK 2-A	SSN# 0016
TP-1	
TP-2	
TP-3	
TP-4 BUCK-3-B	SSN# 0017
BUCK-3-B	SSN# 0017
TP-1	
TP-2	
TP-3	
TP-4 BUCK 4-A	SSN# 0018

OKEECHOBEE 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		
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

DESL	SSN	ROWER
ROD A	(B)	T. D. REE
ROD B	(A)	T. 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	

05-1238

OVERCLOSURE MOUNT. WELLS

+	WEST		EAST
18304	19.92		
12466	19.95	1.0084	45.72
(-0.75)		2.0635	40.03
12997	45.03		
12911	46.58	1.1046	45.15
12298	39.09	2.0367	45.78
14292	31.17	1.4522	40.11
14951	38.85	1.3912	39.19
14795	46.13	1.3185	39.65
END SECTION		1.1787	46.23
16343	39.26		
15849	41.72	1.5263	39.25
15594	20.01	1.5178	44.60
12778	28.88	1.5175	20.18
END SECTION		1.4671	29.54
12116	44.11		
14490	45.01	1.3511	44.86
16740	10.48	1.6193	45.18
11348	15.27	1.2692	10.47
END SECTION		1.3841	15.65

5/18/5

25

DEFL	TR S. ROVER
BUO A	(B) T. D. REE
BUO B	(A) T. D. VIES
BUO 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

Return

Buck2.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
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 5,217 FT WEST AND 2,179 FT SOUTH OF THE SOUTH END OF THE BRIDGE. THE MONUMENT IS LOCATED ON THE SOUTH SIDE OF A MONITORING WELL ENCLOSED BY A 4 FT WOODEN FENCE. THE MARK IS A 3 IN BRONZE SURVEY DISK SET IN CONCRETE, 2 FT SOUTH OF THE FENCE, SET FLUSH WITH THE GROUND. THE NAD 1983 STATE PLANE 1017079 585397 FT. NOTE A MAGNET WAS IMBEDDED IN THE GROUND ON THE SOUTH SIDE OF THE NONE

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 5,217 FT WEST AND 2,176 FT SOUTH OF THE SOUTH END OF THE BRIDGE. THE MARK IS LOCATED ON THE SOUTH

Buck2.met

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 1017082 FT, E=585397 FT. Notable Land NONE

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 5,216 FT WEST AND 2,173 FT 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 SURROUNDING GROUND. THE NAD 1983 STATE PLANE COORDINATE POSITION OF THE MARK IS 1017085 FT, E=585398 FT. Notable Land marks:

NONE

N270754

W0811303

Posi ti onal _Accuracy:

Hori zontal _Posi ti onal _Accuracy:

Hori zontal _Posi ti onal _Accuracy_Report:

The hori zontal posi ti ons were establi shed wi th

sub-meter

GPS

Verti cal _Posi ti onal _Accuracy:

Verti cal _Posi ti onal _Accuracy_Report:

Second Order, Class II

The methodol ogy was approved by Mr. Ronni e Tayl or, State, Geodeti c Advi sor

The NAVD 88 elevati ons establi shed for thi s survey

was

determi ned by using the publi shed val ues for

benchmark

H-437 and J-437.

Li neage:

Process_Step:

Process_Descri pti on:

Hori zontal data was establi shed using Coastguard corrected sub-meter GPS

Verti cal data was establi shed using control points H-437 and J-437.

Process_Date: 20050617

Metadata_Reference_I nformati on:

Metadata_Date: 20050617

Metadata_Contact:

Contact_I nformati on:

Contact_Person_Primary:

Contact_Person: Catheri ne A. Pol l ak

Contact_Organi zati on: George F. Young, Inc.

Page 3

Buck2.met

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: poliak@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

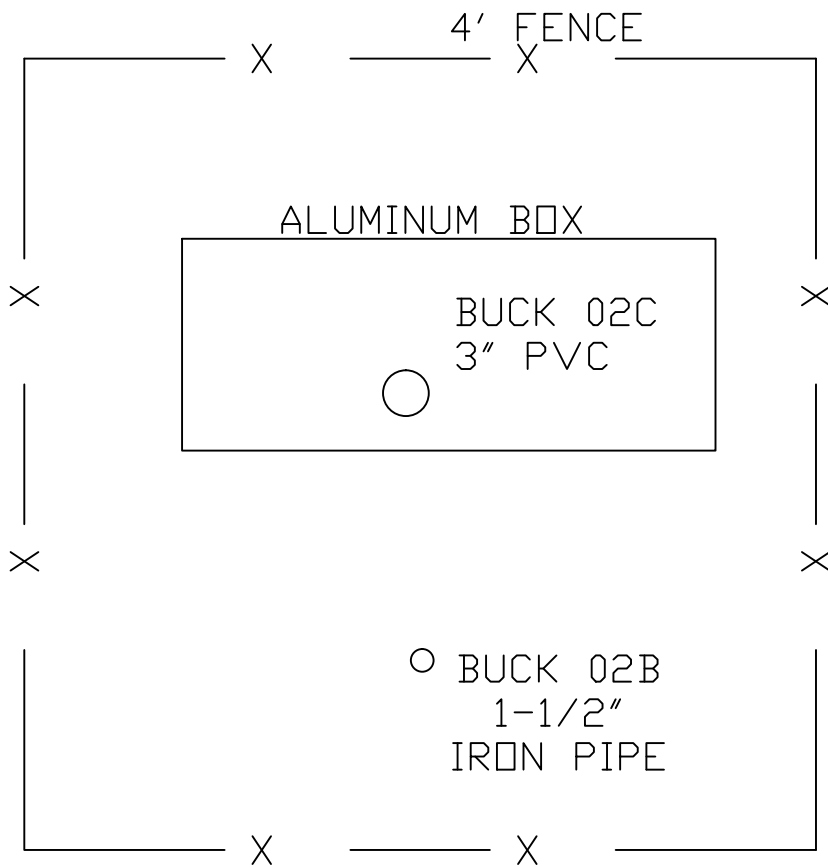


SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY: HIGHLANDS		PROJECT: BUCK ISLAND RANCH	DESIGNATION: BUCK 02A
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 = 585397 FT	Y = 1017079 FT	EL. = 7.9839m
LATITUDE : N270754		LONGITUDE: W0811303	
DESCRIPTION			
<p>To Reach:</p> <p>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 5,217 FT WEST AND 2,179 FT SOUTH OF THE SOUTH END OF THE BRIDGE.</p> <p>THE MONUMENT IS LOCATED ON THE SOUTH SIDE OF A MONITORING WELL ENCLOSED BY A 4 FT WOODEN FENCE. THE MARK IS A 3 IN BRONZE SURVEY DISK SET IN CONCRETE, 2 FT SOUTH OF THE FENCE, SET FLUSH WITH THE GROUND. THE NAD 1983 STATE PLANE COORDINATE POSITION OF THE MARK IS N=1017079 FT, E=585397 FT.</p> <p>NOTE A MAGNET WAS IMBEDDED IN THE GROUND ON THE SOUTH SIDE OF THE MONUMENT.</p>			

Notable Land marks: NONE
SKETCH: SEE ATTACHED SKETCH



○ BUCK 02B
1-1/2"
IRON PIPE

○ BUCK 02A
3" SURVEY DISK IN 12"
CONCRETE MONUMENT

TITLE

SKETCH OF BUCK 02 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
BUCK02.DWG

SHEET
1 OF 1



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY: HIGHLANDS		PROJECT: BUCK ISLAND RANCH	DESIGNATION: BUCK 02B
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 = 585397 FT	Y = 1017082 FT	EL. = 8.1237 m
LATITUDE : N270754		LONGITUDE: W0811303	
DESCRIPTION			
<p>To Reach:</p> <p>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 5,217 FT WEST AND 2,176 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=1017082 FT, E=585397 FT.</p> <p>Notable Land marks: NONE</p>			

SKETCH: SEE ATTACHED SKETCH



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY: HIGHLANDS		PROJECT: BUCK ISLAND RANCH		DESIGNATION: BUCK 02C	
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 = 585398 FT	Y = 1017085 FT	EL. = 8.9817 m	
LATITUDE : N270754			LONGITUDE: W0811303		
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 5,216 FT WEST AND 2,173 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=1017085 FT, E=585398 FT.</p> <p>Notable Land marks: NONE</p>					

SKETCH: SEE ATTACHED SKETCH

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

AE6391
 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
 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
 AE6392.The orthometric height was determined by differential leveling
 AE6392.and adjusted by the National Geodetic Survey in March 1998.

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

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

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

AE6392
 AE6392.The geoid height was determined by GEOID03.

AE6392
 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
 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!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
AE6392!SPC FL E	-	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

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

AE6393 *****

AE6393 DESIGNATION - K 437
 AE6393 PID - AE6393
 AE6393 STATE/COUNTY- FL/HIGHLANDS
 AE6393 USGS QUAD - BRIGHTON NW (1983)

AE6393
 AE6393 *CURRENT SURVEY CONTROL

AE6393* NAD 83(1999)- 27 07 58.62491(N) 081 10 13.53679(W) ADJUSTED
 AE6393* NAVD 88 - 11.431 (meters) 37.50 (feet) ADJUSTED

AE6393
 AE6393 X - 871,882.854 (meters) COMP
 AE6393 Y - -5,612,856.674 (meters) COMP
 AE6393 Z - 2,891,327.461 (meters) COMP
 AE6393 LAPLACE CORR- -3.59 (seconds) DEFLEC99
 AE6393 ELLIP HEIGHT- -13.84 (meters) (05/31/01) GPS OBS
 AE6393 GEOID HEIGHT- -25.29 (meters) GEOID03
 AE6393 DYNAMIC HT - 11.414 (meters) 37.45 (feet) COMP
 AE6393 MODELED GRAV- 979,121.2 (mgal) NAVD 88

AE6393
 AE6393 HORZ ORDER - FIRST
 AE6393 VERT ORDER - SECOND CLASS I
 AE6393 ELLP ORDER - FOURTH CLASS I

AE6393.The horizontal coordinates were established by GPS observations
 AE6393.and adjusted by the National Geodetic Survey in May 2001.

AE6393.The orthometric height was determined by differential leveling
 AE6393.and adjusted by the National Geodetic Survey in March 1998.

AE6393.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AE6393.The Laplace correction was computed from DEFLEC99 derived deflections.

AE6393.The ellipsoidal height was determined by GPS observations
 AE6393.and is referenced to NAD 83.

AE6393.The geoid height was determined by GEOID03.

AE6393.The dynamic height is computed by dividing the NAVD 88
 AE6393.geopotential number by the normal gravity value computed on the
 AE6393.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AE6393.degrees latitude (g = 980.6199 gals.).

AE6393.The modeled gravity was interpolated from observed gravity values.

AE6393;

	North	East	Units	Scale	Factor	Converg.
AE6393;SPC FL E	- 310,146.263	183,105.216	MT	0.99994470	-0 04	39.8
AE6393;UTM 17	- 3,001,172.424	483,110.981	MT	0.99960352	-0 04	39.8

AE6393!
 AE6393!SPC FL E - Elev Factor x Scale Factor = Combined Factor
 AE6393!SPC FL E - 1.00000217 x 0.99994470 = 0.99994687
 AE6393!UTM 17 - 1.00000217 x 0.99960352 = 0.99960569

AE6393
 AE6393 SUPERSEDED SURVEY CONTROL

AE6393 NAD 83(1990)- 27 07 58.62388(N) 081 10 13.53647(W) AD() 1
 AE6393 ELLIP H (05/30/00) -13.87 (m) GP() 3 2
 AE6393 NAVD 88 (05/30/00) 11.43 (m) 37.5 (f) LEVELING 3

AE6393
 AE6393.Superseded values are not recommended for survey control.
 AE6393.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AE6393.[See file dsdata.txt](#) to determine how the superseded data were derived.

AE6393
 AE6393_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML8311101172(NAD 83)
 AE6393_MARKER: DV = VERTICAL CONTROL DISK
 AE6393_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AE6393_STAMPING: K 437 1995
 AE6393_MARK LOGO: NGS
 AE6393_MAGNETIC: N = NO MAGNETIC MATERIAL
 AE6393_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 AE6393+STABILITY: SURFACE MOTION
 AE6393_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AE6393+SATELLITE: SATELLITE OBSERVATIONS - July 13, 1999

AE6393	HISTORY	- Date	Condition	Report By
AE6393	HISTORY	- 1995	MONUMENTED	FLDEP
AE6393	HISTORY	- 19990713	GOOD	BAH

AE6393
 AE6393 STATION DESCRIPTION

AE6393'DESCRIBED BY FL DEPT OF ENV PRO 1995 (LGB)
 AE6393'THE MARK IS ABOUT 16.3 MI (26.2 KM) SOUTHEAST OF LAKE PLACID, 11.6 MI
 AE6393'(18.7 KM) NORTH-NORTHWEST OF LAKEPORT IN SECTION 36, TOWNSHIP 38
 AE6393'SOUTH, RANGE 31 EAST. TO REACH THE MARK FROM THE INTERSECTION OF U.S.
 AE6393'HIGHWAY 27 AND STATE ROAD 70 SOUTH OF LAKE PLACID, GO EAST ON STATE
 AE6393'ROAD 70 FOR 7.7 MI (12.4 KM) TO THE WEST END OF THE BRIDGE OVER CANAL
 AE6393'C 41 (HARNEY POND CANAL), TURN RIGHT AT THE WEST END OF THE BRIDGE,
 AE6393'PASSING THROUGH LOCKED GATE, GO SOUTH ON THE LEVEE ROAD FOR 1.05 MI
 AE6393'(1.69 KM) TO A SHARP CURVE TO THE RIGHT, CONTINUE WEST ON THE LEVEE
 AE6393'ROAD FOR 1.85 MI (2.98 KM) TO A CURVE TO THE LEFT, CONTINUE SOUTH ON
 AE6393'THE LEVEE ROAD FOR 2.1 MI (3.4 KM) TO A CURVE TO THE LEFT, CONTINUE
 AE6393'SOUTHEAST ON THE LEVEE ROAD FOR 2.7 MI (4.3 KM) TO A CURVE TO THE
 AE6393'LEFT, CONTINUE EAST ON THE LEVEE ROAD FOR 1.9 MI (3.1 KM) TO THE
 AE6393'APPROXIMATE CENTER OF A CURVE TO THE RIGHT, CONTINUE SOUTHEAST ON THE
 AE6393'LEVEE ROAD FOR 0.15 MI (0.24 KM) TO THE MARK SET IN THE TOP OF A
 AE6393'CONCRETE MONUMENT IN THE APPROXIMATE CENTER OF THEE LEVEE ROAD AND
 AE6393'RECESSED 0.5 FT (15.2 CM) BELOW THE LEVEL OF THE GROUND. LOCATED 80.0
 AE6393'FT (24.4 M) SOUTHWEST OF THE TOP SCARP OF C 41, 70.2 FT (21.4 M)
 AE6393'NORTHEAST OF A GROUP OF THREE PALM TREES AND 68.7 FT (20.9 M)
 AE6393'NORTHEAST OF A CARSONITE WITNESS POST. NOTE ALL GATES ON LEVEE ARE
 AE6393'LOCKED, FOR KEY CONTACT CARL ZEISS, SOUTH FLORIDA WATER MANAGEMENT
 AE6393'DISTRICT, WEST PALM BEACH, FL. PHONE NUMBER (407) 686-8800.

AE6393
 AE6393 STATION RECOVERY (1999)

AE6393
 AE6393 RECOVERY NOTE BY BERRYMAN & HENIGAR 1999 (BH)
 AE6393 RECOVERED AS DESCRIBED.

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

SFWMD - Buck Island Ranch
Monitoring Well Benchmarks
Computation Sheet

West 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	Preliminary Adjusted Elevation (meters)	Preliminary Prorated Elevation Adjustment	Benchmark Description
1.5769	10.9719		9.3950					1.5290	9.5759		8.0469	Buck 1A					8.0469	8.0479	Buck 1A
1.2373	10.2816	1.9276	9.0443	H-437				1.6929	10.5401	0.7287	8.8472								
1.4202	10.2451	1.4567	8.8249					1.1648	9.8373		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		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		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					1.2995	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								
1.4155	9.4682	1.5257	8.0527					1.5197	9.6189	1.4218	8.0992								
1.3800	9.5978	1.2504	8.2178					1.4410	9.5470	1.5129	8.1060								
1.4729	9.4851	1.5856	8.0122					1.4633	9.5983	1.4120	8.1350								
1.1798	9.2667	1.3982	8.0869					1.4779	9.6110	1.4652	8.1331								
		1.2417	8.0250	Buck 11B	8.4865	8.4030	0.0835	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											
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	Preliminary Adjusted Elevation (meters)	Preliminary 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	7.8761									
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	0.6309	7.8339	Buck 13A	1.0175						1.5924	9.4993	0.6432	7.9069	Buck 14B	0.9492			
			8.8514	Buck 13C										8.8561	Buck 14C				
0.6310	9.4824	1.6486	8.8514	Buck 13C	-1.0176	1.0176	8.8515	Buck 13C			0.6432	9.4993	1.5924	8.8561	Buck 14C	-0.9492	0.9492	8.8561	Buck 14C
			7.8338	Buck 13A										7.9069	Buck 14B				
1.4950	9.3711	1.4543	7.8761	Buck 15A	0.0407						1.5014	9.3775	0.6178	7.8761	Buck 15A	0.8836			
			7.9168	Buck 15B										8.7597	Buck 15C				
1.4541	9.3709	1.4950	7.9168	Buck 15B	-0.0409	0.0408	7.9169	Buck 15B			0.6176	9.3773	1.5015	8.7597	Buck 15C	-0.8839	0.88375	8.7598	Buck 15C
			7.8759	Buck 15A										7.8758	Buck 15A				
1.4968	9.4699	0.6344	7.9731	Buck 16B	0.8624						1.6031	9.5600	0.6598	7.9569	Buck 18B	0.9433			
			8.8355	Buck 16C										8.9002	Buck 18C				
0.6344	9.4699	1.4969	8.8355	Buck 16C	-0.8625	0.8625	8.8355	Buck 16C			0.6585	9.5587	1.6019	8.9002	Buck 18C	-0.9434	0.94335	8.9002	Buck 18C
			7.9730	Buck 16B										7.9568	Buck 18B				
1.5298	9.3816	1.4450	7.8518	Buck 17A	0.0848						1.5299	9.4060	0.5377	7.8761	Buck 17A	0.9922			
			7.9366	Buck 17B										8.8683	Buck 17C				
1.4461	9.3827	1.5300	7.9366	Buck 17B	-0.0839	0.0844	7.9362	Buck 17B			0.5378	9.4061	1.5296	8.8683	Buck 17C	-0.9918	0.992	8.8681	Buck 17C
			7.8527	Buck 17A										7.8765	Buck 17A				
1.4539	9.5293	0.5987	8.0754	Buck 12B	0.8552						1.4625	9.4332	0.4901	7.9707	Buck 22B	0.9724			
			8.9306	Buck 12C										8.9431	Buck 22C				
0.6001	9.5307	1.4559	8.9306	Buck 12C	-0.8558	0.8555	8.9309	Buck 12C			0.4924	9.4355	1.4650	8.9431	Buck 22C	-0.9726	0.9725	8.9432	Buck 22C
			8.0748	Buck 12B										7.9705	Buck 22B				
1.5261	9.5037	1.3454	7.9776	Buck 19A	0.1807						1.5237	9.5013	0.532	7.9776	Buck 19A	0.9917			
			8.1583	Buck 19B										8.9693	Buck 19C				
1.3431	9.5014	1.5236	8.1583	Buck 19B	-0.1805	0.1806	8.1582	Buck 19B			0.5324	9.5017	1.5234	8.9693	Buck 19C	-0.991	0.99135	8.9689	Buck 19C
			7.9778	Buck 19A										7.9783	Buck 19A				
1.6168	9.3737	1.5146	7.7569	Buck 21A	0.1022						1.6190	9.3759	0.5827	7.7569	Buck 21A	1.0363			
			7.8591	Buck 21B										8.7932	Buck 21C				
1.5183	9.3774	1.6206	7.8591	Buck 21B	-0.1023	0.1023	7.8591	Buck 21B			0.5806	9.3738	1.6166	8.7932	Buck 21C	-1.036	1.03615	8.7930	Buck 21C
			7.7568	Buck 21A										7.7572	Buck 21A				
1.4749	9.3474	1.4620	7.8725	Buck 20A	0.0129						1.4775	9.3500	0.4893	7.8725	Buck 20A	0.9882			
			7.8854	Buck 20B										8.8607	Buck 20C				
1.4647	9.3501	1.4775	7.8854	Buck 20B	-0.0128	0.0129	7.8853	Buck 20B			0.4859	9.3466	1.4744	8.8607	Buck 20C	-0.9885	0.98835	8.8608	Buck 20C
			7.8726	Buck 20A										7.8722	Buck 20A				
1.5426	9.5905	1.4994	8.0479	Buck 1A	0.0432						1.5400	9.5879	0.5966	8.0479	Buck 1A	0.9434			
			8.0911	Buck 1B										8.9913	Buck 1C				
1.4973	9.5884	1.5408	8.0911	Buck 1B	-0.0435	0.0433	8.0912	Buck 1B			0.6008	9.5921	1.5442	8.9913	Buck 1C	-0.9434	0.9434	8.9913	Buck 1C
			8.0476	Buck 1A										8.0479	Buck 1A				
1.5526	9.5365	1.4119	7.9839	Buck 2A	0.1407						1.5520	9.5359	0.5536	7.9839	Buck 2A	0.9984			
			8.1246	Buck 2B										8.9823	Buck 2C				
1.4106	9.5352	1.5495	8.1246	Buck 2B	-0.1389	0.1398	8.1237	Buck 2B			0.5974	9.5797	1.5945	8.9823	Buck 2C	-0.9971	0.99775	8.9817	Buck 2C
			7.9857	Buck 2A										7.9852	Buck 2A				

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									

DBHYDRO | by station

STATION INFORMATION

Station	BUCK02_G
Site	BUCK02
Type	WELL
Latitude (ddmmss.sss)	270753.95
Longitude (ddmmss.sss)	811303.307
X Coord (ft) NAD83	585398
Y Coord (ft) NAD83	1017090
County	Highlands
Basin	C-41N
Section	33
Township	38
Range	31
Show Map	Google Map
Well Info	Info
Description	Middle of unimproved pasture W1 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).

[Get Time Series Data](#)

Office

Project

9 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

BUCK 02

1/1

Latitude: 27 07 54
Longitude: 81 13 03
Elevation/Z: 0

Northing/Y: 1017094.827
Easting/X: 585426.975
Elevation/Z: 1.220
Convergence: -0 05 57.07823
Scale Factor: 0.999946913
Combined Factor: 0.999950799

Remark:

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