

SEC 26 TWP 31 RGE 31

VERIFY ELEVATIONS AT WELL SITE LKBA2B, POS 5  
POF 23

STA	+	HI	-	ELEV.	REMARKS
BM Z460 1997				55.15 (NAVD 88)	FD GOOD COND BM Z460 (NAVD 88 = 53.93)
	5.83	60.98			
	1.43				
WELL POF 23 4" PVC			1.73	59.25	AKA G W 3 4" PVC
WELL POS 5 4" PVC			2.345	58.635	AKA G W 2 4" PVC
WELL LKBA 2B 4" PVC			1.54	59.44	AKA POS 4 4" PVC
BM Z460 1997		5.83		55.15	BM Z460 1997 (NAVD 88 = 53.93)

K M STRICKLAND  
Ø REICHERT  
Ø EBANKS

LKBA2B GW 1  
ELEV. 59.45  
DATE 5 1 08  
BY EE JS MR  
NAVD NGVD 29

05.13.2008

POS 5 GW 2  
ELEV. 58.635  
DATE 5 1 08  
BY EE JS MR  
NAVD NGVD 29

SN 212008

2000 FT



05.13.2008

POF23 GW3  
ELEV. 59.25  
DATE 5 1 08  
BY EE JS MR  
NAVD NGVD 29

SN 211198

SN 000000000000021198

05.13.2008

GW3



LKBA2B

POF23

POS5

POS5 Benchmark

POF23 Benchmark

02.14.2008



GW2  
58.64  
1/10/08

02.14.2008

GW3  
59.26  
1/10/08

02.14.2008

11-12-07

LEV. = 59.45 NGVD 1929

KEITH & ASSOC.

1.22 TO NAVD 1988

LKBA 2B WELL  
ELEV. 59.404  
DATE 9 14 07  
BY EE NM INC.  
NAVD NGVD 29

02.14.2008





The NGS Data Sheet

See file [dsdata.txt](#) for more

DATABASE = Sybase ,PROGRAM  
1 National Geodetic

AH8768 \*\*\*\*\*  
AH8768 DESIGNATION - Z 460  
AH8768 PID - AH8768  
AH8768 STATE/COUNTY- FL/POLK  
AH8768 USGS QUAD - FORT KISSIMMEE NW (1972)

\*CURRENT SURVEY CONTROL

AH8768*	NAD 83(1986)-	27 44 56.	(N)	081 11 01.	(W)	SCALED
AH8768*	NAVD 88	-	16.438	(meters)	53.93	(feet) ADJUSTED
AH8768	GEOID HEIGHT-	-26.64	(meters)			GEOID03
AH8768	DYNAMIC HT -	16.413	(meters)	53.85	(feet)	COMP
AH8768	MODELED GRAV-	979,157.5	(mgal)			NAVD 88

AH8768 VERT ORDER - SECOND CLASS I

AH8768.The horizontal coordinates were scaled from a topographic map and have  
AH8768.an estimated accuracy of +/- 6 seconds.

AH8768.The orthometric height was determined by differential leveling  
AH8768.and adjusted in July 1999.

AH8768.The geoid height was determined by GEOID03.

AH8768.The dynamic height is computed by dividing the NAVD 88  
AH8768.geopotential number by the normal gravity value computed on the  
AH8768.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
AH8768.degrees latitude (g = 980.6199 gals.).

AH8768.The modeled gravity was interpolated from observed gravity values.

AH8768;		North	East	Units	Estimated Accuracy
AH8768;SPC FL W	-	378,650.	280,480.	MT	(+/- 180 meters Scaled)

SUPERSEDED SURVEY CONTROL

No superseded survey control is available for this station.

AH8768 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML819694(NAD 83)  
AH8768\_MARKER: F = FLANGE-ENCASED ROD  
AH8768\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)   
AH8768\_STAMPING: Z 460 1997  
AH8768\_MARK LOGO: NGS  
AH8768\_PROJECTION: FLUSH  
AH8768\_MAGNETIC: N = NO MAGNETIC MATERIAL  
AH8768\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
AH8768\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
AH8768+SATELLITE: SATELLITE OBSERVATIONS - 1997  
AH8768\_ROD/PIPE-DEPTH: 12.3 meters

AH8768	HISTORY	- Date	Condition	Report By
AH8768	HISTORY	- 1997	MONUMENTED	FLDEP

STATION DESCRIPTION

AH8768'DESCRIBED BY FL DEPT OF ENV PRO 1997 (JLM)  
AH8768'THE MARK IS ABOUT 30.0 MI (48.3 KM) SOUTHEAST OF LAKE WALES, 0.6 MI  
AH8768'(1.0 KM) WEST OF THE KISSIMMEE RIVER ON KICCO ROAD IN SECTION 25,  
AH8768'TOWNSHIP 31 SOUTH, RANGE 31 EAST. TO REACH THE MARK FROM THE  
AH8768'INTERSECTION OF STATE ROAD 27 UNDERPASS AND STATE ROAD 60 IN LAKE  
AH8768'WALES, GO EAST-SOUTHEAST ON STATE ROAD 60 FOR 25.7 MI (41.4 KM) TO THE  
AH8768'JUNCTION OF RIVER RANCH BOULEVARD ON THE RIGHT, TURN RIGHT ON RIVER  
AH8768'RANCH BOULEVARD AND GO SOUTHEAST FOR 2.55 MI (4.10 KM) TO THE GUARD  
AH8768'HOUSE AT THE ENTRANCE TO RIVER RANCH, CONTINUE SOUTH ON RIVER RANCH  
AH8768'BOULEVARD FOR 0.3 MI (0.5 KM) TO THE JUNCTION OF KICCO ROAD ON THE  
AH8768'RIGHT, TURN RIGHT ON KICCO ROAD AND GO SOUTHEAST FOR 0.2 MI (0.3 KM)

DATASHEETS

AH8768' TO FOUR SETS OF DOUBLE UNLOCKED GATES, CONTINUE SOUTH ON KICCO ROAD  
AH8768' FOR 0.5 MI (0.8 KM) TO ANOTHER UNLOCKED METAL GATE, CONTINUE SOUTHEAST  
AH8768' ON KICCO ROAD FOR 0.2 MI (0.3 KM) TO THE JUNCTION OF ROAD ON THE LEFT,  
AH8768' CONTINUE SOUTH-SOUTHEAST ON KICCO ROAD FOR 0.8 MI (1.3 KM) TO THE MARK  
AH8768' ON THE RIGHT, A STAINLESS STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF  
AH8768' 40.3 FT (12.3 M) WITH A LOGO CAP FLUSH WITH THE GROUND AND LEVEL WITH  
AH8768' KICCO ROAD, THE DATUM POINT IS RECESSED 0.4 FT (12.2 CM) BELOW THE  
AH8768' LEVEL OF THE LOGO CAP. LOCATED 37.5 FT (11.4 M) SOUTHWEST OF THE  
AH8768' APPROXIMATE CENTERLINE OF KICCO ROAD AND 1.0 FT (0.3 M) NORTHWEST OF A  
AH8768' CARSONITE WITNESS POST. NOTE ACCESS TO DATUM POINT IS HAD THROUGH A  
AH8768' 5-INCH LOGO CAP. FOR KEY CONTACT SOUTH FLORIDA WATER MANAGEMENT  
AH8768' DISTRICT AT 561-686-8800.

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



# South Florida Water Management District Benchmark Database

Report run on: February 25, 2008 6:56 AM

Designation: Z460	Latitude: 274456.000	Scaled values only
County: POLK	Longitude: 811101.000	
USGS Quad: FT.KISSIMMEE NW	Monument By: FL DEPT OF ENVIR PROT	
Project: LKBA2B WELL SITE	Year: 1997	
Sec: 25    Twp: 31    Rge: 31	Type: V	
Status: GOOD	Stamping: Z 460 1997	
<b>NAD 1927 Coordinates:</b>	Party Chief:	
N =	Field Book	
E =	Page:	
Adjustment:	<b>NGVD 1929</b>	
<b>NAD 1983 Coordinates:</b>	Elevation: 55.114	
X =	Order: 2	
Y =	Class: I	
Adjustment:	<b>NAVD 1988</b>	
Order:	Elevation: 53.930	
Class:	Order: 2	
	Class: I	

Description:

OLD NGVD 1929 ELEVATION = 55.15  
 \*\*\*\*\* RECOVERY NOTE \*\*\*\*\*  
 3/6/2007 RAGER NICK MILLER INC FIELDBOOK19 PAGE 53 BM Z460  
 5/6/1999 PURPERA OF 3001 INC., A CONTRACTOR FOR THE CORPS OF ENGINEERS,  
 FIELD BOOK #1 99-133, PAGE 16, Z 460 (1997) EL. 55.24 NGVD 29, A  
 STAINLESS STEEL ROD WITH ACCESS CAP STAMPED "Z 460 1997"  
 \*\*\*\*\*

THE NGS DATA SHEET  
 DATABASE = SYBASE ,PROGRAM = DATASHEET, VERSION = 6.20  
 STARTING DATASHEET RETRIEVAL...  
 1 NATIONAL GEODETIC SURVEY, RETRIEVAL DATE = MAY 24, 2000  
 AH8768 \*\*\*\*\*  
 AH8768 DESIGNATION - Z 460  
 AH8768 PID - AH8768  
 AH8768 STATE/COUNTY- FL/POLK  
 AH8768 USGS QUAD - FORT KISSIMMEE NW (1973)  
 AH8768  
 AH8768 \*CURRENT SURVEY CONTROL  
 AH8768  
 AH8768\* NAD 83(1986)- 27 44 56. (N) 081 11 01. (W) SCALED  
 AH8768\* NAVD 88 - 16.438 (METERS) 53.93 (FEET) ADJUSTED  
 AH8768  
 AH8768 GEOID HEIGHT- -26.67 (METERS) GEOID99  
 AH8768 DYNAMIC HT - 16.413 (METERS) 53.85 (FEET) COMP  
 AH8768 MODELED GRAV- 979,157.5 (MGAL) NAVD 88  
 AH8768  
 AH8768 VERT ORDER - SECOND CLASS I  
 AH8768  
 AH8768.THE HORIZONTAL COORDINATES WERE SCALED FROM A TOPOGRAPHIC MAP AND HAVE  
 AH8768.AN ESTIMATED ACCURACY OF +/- 6 SECONDS.  
 AH8768  
 AH8768.THE ORTHOMETRIC HEIGHT WAS DETERMINED BY DIFFERENTIAL LEVELING  
 AH8768.AND ADJUSTED BY THE NATIONAL GEODETIC SURVEY IN JULY 1999.



# South Florida Water Management District Benchmark Database

Report run on: February 25, 2008 6:56 AM

AH8768  
 AH8768.THE GEOID HEIGHT WAS DETERMINED BY GEOID99.  
 AH8768  
 AH8768.THE DYNAMIC HEIGHT IS COMPUTED BY DIVIDING THE NAVD 88  
 AH8768.GEOPOTENTIAL NUMBER BY THE NORMAL GRAVITY VALUE COMPUTED ON THE  
 AH8768.GEODETIC REFERENCE SYSTEM OF 1980 (GRS 80) ELLIPSOID AT 45  
 AH8768.DEGREES LATITUDE (G = 980.6199 GALS.).  
 AH8768  
 AH8768.THE MODELED GRAVITY WAS INTERPOLATED FROM OBSERVED GRAVITY VALUES.  
 AH8768  
 AH8768;                    NORTH        EAST    UNITS ESTIMATED ACCURACY  
 AH8768;SPC FL W   - 378,650.   280,480.   MT (+/- 180 METERS SCALED)  
 AH8768  
 AH8768                    SUPERSEDED SURVEY CONTROL  
 AH8768  
 AH8768.NO SUPERSEDED SURVEY CONTROL IS AVAILABLE FOR THIS STATION.  
 AH8768  
 AH8768\_MARKER: F = FLANGE-ENCASED ROD  
 AH8768\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)  
 AH8768\_STAMPING: Z 460 1997  
 AH8768\_PROJECTION: FLUSH  
 AH8768\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 AH8768\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 AH8768\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 AH8768+SATELLITE: SATELLITE OBSERVATIONS - 1997  
 AH8768\_ROD/PIPE-DEPTH: 12.3 METERS  
 AH8768  
 AH8768 HISTORY    - DATE        CONDITION        RECOV. BY  
 AH8768 HISTORY    - 1997        MONUMENTED        FLDEP  
 AH8768  
 AH8768                    STATION DESCRIPTION  
 AH8768  
 AH8768'DESCRIBED BY FL DEPT OF ENV PRO 1997 (JLM)  
 AH8768'THE MARK IS ABOUT 30.0 MI (48.3 KM) SOUTHEAST OF LAKE WALES, 0.6 MI  
 AH8768'(1.0 KM) WEST OF THE KISSIMMEE RIVER ON KICCO ROAD IN SECTION 25,  
 AH8768'TOWNSHIP 31 SOUTH, RANGE 31 EAST. TO REACH THE MARK FROM THE  
 AH8768'INTERSECTION OF STATE ROAD 27 UNDERPASS AND STATE ROAD 60 IN LAKE  
 AH8768'WALES, GO EAST-SOUTHEAST ON STATE ROAD 60 FOR 25.7 MI (41.4 KM) TO THE  
 AH8768'JUNCTION OF RIVER RANCH BOULEVARD ON THE RIGHT, TURN RIGHT ON RIVER  
 AH8768'RANCH BOULEVARD AND GO SOUTHEAST FOR 2.55 MI (4.10 KM) TO THE GUARD  
 AH8768'HOUSE AT THE ENTRANCE TO RIVER RANCH, CONTINUE SOUTH ON RIVER RANCH  
 AH8768'BOULEVARD FOR 0.3 MI (0.5 KM) TO THE JUNCTION OF KICCO ROAD ON THE  
 AH8768'RIGHT, TURN RIGHT ON KICCO ROAD AND GO SOUTHEAST FOR 0.2 MI (0.3 KM)  
 AH8768'TO FOUR SETS OF DOUBLE UNLOCKED GATES, CONTINUE SOUTH ON KICCO ROAD  
 AH8768'FOR 0.5 MI (0.8 KM) TO ANOTHER UNLOCKED METAL GATE, CONTINUE SOUTHEAST  
 AH8768'ON KICCO ROAD FOR 0.2 MI (0.3 KM) TO THE JUNCTION OF ROAD ON THE LEFT,  
 AH8768'CONTINUE SOUTH-SOUTHEAST ON KICCO ROAD FOR 0.8 MI (1.3 KM) TO THE MARK  
 AH8768'ON THE RIGHT, A STAINLESS STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF  
 AH8768'40.3 FT (12.3 M) WITH A LOGO CAP FLUSH WITH THE GROUND AND LEVEL WITH  
 AH8768'KICCO ROAD, THE DATUM POINT IS RECESSED 0.4 FT (12.2 CM) BELOW THE  
 AH8768'LEVEL OF THE LOGO CAP. LOCATED 37.5 FT (11.4 M) SOUTHWEST OF THE  
 AH8768'APPROXIMATE CENTERLINE OF KICCO ROAD AND 1.0 FT (0.3 M) NORTHWEST OF A  
 AH8768'CARSONITE WITNESS POST. NOTE ACCESS TO DATUM POINT IS HAD THROUGH A  
 AH8768'5-INCH LOGO CAP. FOR KEY CONTACT SOUTH FLORIDA WATER MANAGEMENT  
 AH8768'DISTRICT AT 561-686-8800.  
 ELAPSED TIME = 00:00:02

	A	B	C	D
1				
2				
3	<b>Registration Information - LKBA2B Addendum</b>			
4		Today's Date	6/6/2008	
5		Site Name:	LKBA2B	
6		Activity	Addendum	
7		Effective Date:	5/13/2008	
8		Start Date of data (if different from effective date):		
9	<b>Customer</b>			
10		Name:		
11		Business Area (Division):		
12		Agency:		
13		Internal Order		
14		Fund		
15		Legal Mandate:		
16	<b>Project Manager:</b>			
17		Name:	Ebanks/Reichert	
18		Division:	5812/Survey & Eng.	
19		Agency:	SFWMD	
20		Project Name:		
21		Contract #:		
22				
23		Common Name		0
24		PM Notes:	This Addendum was performed to add surveying data for reference elevation change. Marked on side of well POS 4 under recorder box. POS 5 is GW 2.	145
25				
26		Recorder Location/Purpose:	Stand-Alone Recorder (Non-Flow Site)	
27		Type of Recorder:	CR-10	
28		Array ID Configuration Table attached	NO	
29		If water control structure, select:		
30	<b>Travel &amp; Access</b>			
31		Transportation		
32		Lock Type		
33		Combination		
34		Directions	To reach the mark from the intersection of State Road 27 underpass and State Road 60 in Lake Wales, go East-southeast on State Road 60 for 25.7 Miles to the junction of River Ranch Boulevard on the right, Turn right on River Ranch Boulevard and go southeast for 2.55 milesto the guard house at the entrance to River Ranch, continue South on River Ranch Boulevard for 0.3 of a mile to the junction of Kicco Rd on the right,turn right on Kicco Rd and go southeast for 0.2 of a mile to four sets of double	905
35		Address		
36	<b>Survey Information</b>			
37		Benchmark Elevation	55.15	
38		Date	12/28/2007	
39		Stamp	Z 460 1997	
40		Agency	SFWMD	
41		Type		
42		Benchmark Datum	NGVD 29	
43		Benchmark Location/Description	A stainless steel rod driven to refusal at a depth of 40.3 feet with a logo cap flush with ground and level with Kicco Rd..1.0 ft NW of carsonite sign	150
44	<b>Communications Information</b>			
45		Communication System		
46		Communication Type		
47		R.F. Code / Modem Address		
48		Phone Number		
49		Tower		
50		R.F. Access Point		
51		RTU Address		
52		Loggernet Server		
53		IP Address		
54		Gateway1		
55		Gateway2		
56		Gateway3		
57		Gateway4		

A	B	C	D
1			
2			
3	<b>Registration Information - LKBA2B Addendum</b>		
4	Today's Date	1/20/2008	
5	Site Name:	LKBA2B	
6	Activity	Addendum	
7	Effective Date:	2/29/2008	
8	Start Date of data (if different from effective date):		
9	<b>Customer</b>		
10	Name:	Steve Anderson	
11	Business Area (Division):	5430/4350	
12	Agency:	540/430	
13	Internal Order	DA0000001890	
14	Fund	101000	
15	Legal Mandate:		
16	<b>Project Manager:</b>		
17	Name:	Christian Popescu	
18	Division:	5727	
19	Agency:	570	
20	Project Name:	Kissimmee Basin Paired Wells Program	
21	Contract #:	SAP PO# 4500014989	
22			
23	Common Name		
24	PM Notes:	2 new groundwater wells are to be added to the existing site with this addendum	0
25			79
26	Recorder Location/Purpose:	Stand-Alone Recorder (Non-Flow Site)	
27	Type of Recorder:	CR-10	
28	Array ID Configuration Table attached	YES	
29	If water control structure, select:		
30	<b>Travel &amp; Access</b>		
31	Transportation		
32	Lock Type		
33	Combination		
34	Directions		0
35	Address		
36	<b>Survey Information</b>		
37	Benchmark Elevation	55.12 ft	
38	Date		6/6/1997
39	Stamp	Z460	
40	Agency	DEP	
41	Type	IROD	
42	Benchmark Datum	NGVD 29	
43	Benchmark Location/Description	Located at monitoring well site LKBA2B.... FLDEP Rod with logo	66
44	<b>Communications Information</b>		
45	Communication System		
46	Communication Type		
47	R.F. Code / Modem Address		
48	Phone Number		
49	Tower		
50	R.F. Access Point		
51	RTU Address		
52	Loggernet Server		
53	IP Address		
54	Gateway1		
55	Gateway2		
56	Gateway3		
57	Gateway4		