

Identification_Information:

Citation:

Citation_Information:

**Mike J. Bartholomew
Biscayne Engineering**

Originator: Mike J. Bartholomew
Publication_Date: Unpublished material
Publication_Time: Unknown
Title: Martin County Tape Down Wells (M1270)
Edition: 1.0
Series_Information:
Publication_Information:
Larger_Work_Citation:
Citation_Information:
Series_Information:
Publication_Information:

Description:

Purpose

Abstract: S. E. Bridge Road, Martin County, Florida
Purpose:

the well

To establish elevations on the well and on a disc set adjacent to
and provide the results in NAVD-88 format in accordance
with the CERP height modernization program

Supplemental_Information: None

Time_Period_of_Content:

Time_Period_Information:

Survey Date

Single_Date/Time:

Range_of_Dates/Times:

Beginning_Date: 20050801

Ending_Date: 20050901

Multiple_Dates/Times:

Currentness_Reference: Date and Time Range of Field/Office Work

Status:

Progress: Complete

Maintenance_and_Update_Frequency: Unknown

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -080°13'46"

East_Bounding_Coordinate: -080°13'46"

North_Bounding_Coordinate: +27°02'40"

South_Bounding_Coordinate: +27°02'40"

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Well Site

Theme_Keyword: MARTIN

Theme_Keyword: M1270

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Well Site

Place_Keyword: Martin County, Florida

Place_Keyword: S. E. Bridge Road

Place_Keyword: Sec. 27, Twp. 39S, Rge. 41 E

Stratum:

Temporal:

Access_Constraints: None

Use_Constraints: None

Point_of_Contact:

Elvie Ebanks

SFWMD

District

Contact_Information:

Contact_Person_Primary:

Contact_Person: Elvie Ebanks

Contact_Organization: South Florida Water Management

Contact_Organization_Primary:

Contact_Position: Project Manager

Contact_Address:

Address_Type: mailing and physical address

Address: 3301 Gun Club Road

City: West Palm Beach

State_or_Province: FL

Postal_Code: 33406

Country: USA

M1270.gen

Contact_Voice_Telephone: (561) 753-2400 x4717

Contact_Facsimile_Telephone: (561) 791-4093

Security_Information:

Cross_Reference:

Citation_Information:

Series_Information:

Publication_Information:

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

Equipment Used

This Survey was prepared using GPS and Leveling instruments. The horizontal location of the well was established using GPS.

The vertical data was collected using Level Wild NA-2. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/90. Elevations based on NAVD88

Logical_Consistency_Report:

Horizontal data was established using NGS control points AJ5611 (P 516) and AC5348 (BR 26 A).

Vertical data was established using NGS benchmarks AC5345 (I 95 89 A 24 REF MK) and AC5343 (I 95 89 A 24).

Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/90.

Elevations are based on NAVD88.

Completeness_Report:

Horizontal location taken at approximate center of well.

Project Results

Lat. +27°02' 39.783"

Long. -080°13' 45.829"

N 986072.428

E 906996.021

New leveled elevations.

New site benchmark "M1235" is a standard S.F.W.M.D. brass disc set in a concrete headwall adjacent to the well.

Disc Elevation is 15.17' (NAVD88)

Top of Pipe (well M1270) Elevation is 16.79' (NAVD88)

based on NGS NAVD88 adjustment of vertical network.

Origin of NAVD88 elevation for BM "M1235" and well

"M1270" is closed bench level circuit through NGS benchmarks AC5345 (I 95 89 A 24 REF MK) and AC5343 (I 95 89 A 24)

Well is situated North of S.E. Bridge Road (S.R. 708), and East of I-95, in Section 27, Township 39 South, Range 41 East, Martin County, Florida

TO REACH the well from the intersection of Interstate 95 and S.E. Bridge Road (S.R. 708), travel East on S.E. Bridge Road for 0.3 miles (more or less) to an entrance (dirt road) on the left (North). Turn left and travel North to a fence marking the North Right-of-Way line of S.E. Bridge Road (S.R. 708), and the well on the left. Well is situated South of a chain link fence, 4.5 feet (more or less) West of a well "M1235", and 46 feet (more or less) West of a SFWMD disc stamped "M1235 2005" set in a concrete headwall for the ditch (on the West side of the dirt road). Top of well is beneath the ground surface inside of a valve box which is flush with the ground.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal

Horizontal_Positional_Accuracy_Report:

The horizontal position of the well "M1270" was established using differential GPS. NGS points AJ5611 (P 516) and AC5348 (BR 26 A) were used as a source of horizontal control.

Quantitative_Horizontal_Positional_Accuracy_Assessment:

Horizontal_Positional_Accuracy_Value: 1 meter

Horizontal_Positional_Accuracy_Explanation: The intended

horizontal positional accuracy for this survey is 1 meter

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

Level Line

M1270.gen

A level line was run originating on NGS control point AC5345 (I 95 89 A 24 REF MK) with NAVD-88 elevation, running through well "M1270" and disc "M1235" and

terminated on

point AC5343 (I 95 89 A 24) in accordance with Florida Minimum Technical Standards.

Quantitative_Vertical_Positional_Accuracy_Assessment:

Vertical_Positional_Accuracy_Value: 0.02 feet

Vertical_Positional_Accuracy_Explanation: A bench level

circuit was performed between AC5345 (I 95 89 A 24 REF MK) and AC5343 (I 95 89 A 24), running through well "M1270" in accordance with Florida Minimum Technical Standards (Chapter 61g17-6, FAC). Length of benchmark run is 0.758 miles. Allowable error is 0.04 feet. Achieved Accuracy is 0.025 feet.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Series_Information:

Publication_Information:

Larger_Work_Citation:

Citation_Information:

Series_Information:

Publication_Information:

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Range_of_Dates/Times:

Multiple_Dates/Times:

Process_Step:

Process_Description:

The horizontal work was performed using Ashtech GPS receivers. The vertical work was performed using level

Wild

N-A2

Process_Date: 20050823

Process_Time: 09000000

Process_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Organization_Primary:

Contact_Address:

Spatial_Data_Organization_Information:

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Planar:

Map_Projection:

Albers_Conical_Equal_Area:

Azimuthal_Equidistant:

Equidistant_Conic:

Equiangular:

General_Vertical_Near-sidereal_Perspective:

Gnomonic:

Lambert_Azimuthal_Equal_Area:

Lambert_Conformal_Conic:

Mercator:

Modified_Stereographic_for_Alaska:

Miller_Cylindrical:

Oblique_Mercator:

Oblique_Line_Point:

Orthographic:

Polar_Stereographic:

Polyconic:

Robinson:

Sinusoidal:

van_der_Grinten:

Space_Oblique_Mercator_(Landsat):

Stereographic:

Transverse_Mercator:

van_der_Grinten:

M1270.gen
 Grid_Coordinate_System:
 Universal_Transverse_Mercator:
 Transverse_Mercator:
 Universal_Polar_Stereographic:
 Polar_Stereographic:
 StatePlane_Coordinate_System:
 Lambert_Conformal_Conic:
 Transverse_Mercator:
 Oblique_Mercator:
 Oblique_Line_Point:
 Polyconic:
 ARC_Coordinate_System:
 Equi_rectangular:
 Azimuthal_Equidistant:
 Local_Planar:
 Planar_Coordinate_Information:
 Coordinate_Representation:
 Distance_and_Bearing_Representation:
 Local:
 Geodetic_Model:
 Vertical_Coordinate_System_Definition:
 Altitude_System_Definition:
 Depth_System_Definition:
 Entity_and_Attribute_Information:
 Detailed_Description:
 Entity_Type:
 Attribute:
 Attribute_Domain_Values:
 Attribute_Value_Accuracy_Information:
 Overview_Description:
 Distribution_Information:
 Distributor:
 Contact_Information:
 Contact_Person_Primary:
 Contact_Organization_Primary:
 Contact_Address:
 Standard_Order_Process:
 Digital_Form:
 Digital_Transfer_Information:
 Digital_Transfer_Option:
 Online_Option:
 Computer_Contact_Information:
 Network_Address:
 Delivery_Instructions:
 Offline_Option:
 Recording_Capacity:
 Available_Time_Period:
 Time_Period_Information:
 Single_Date/Time:
 Range_of_Dates/Times:
 Multiple_Dates/Times:
 Metadata_Reference_Information:
 Metadata_Date: 20050823
 Metadata_Contact:
 Contact_Information:
 Contact_Person_Primary:
 Contact_Person: Mike J. Bartholomew
 Contact_Organization: Biscayne Engineering Company, Inc.
 Contact_Organization_Primary:
 Contact_Position: Project Surveyor
 Contact_Address:
 Address_Type: mailing and physical address
 Address: 529 W. Flagler Street
 City: Miami
 State_or_Province: FL
 Postal_Code: 33130
 Country: USA
 Contact_Voice_Telephone: (305) 324-7671
 Contact_Facsimile_Telephone: (305) 324-0809
 Contact_Electronic_Mail_Address: mi keb@biscayneengineering.com

M1270.gen

Hours_of_Service: 8:00 AM to 5:00 PM EST

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: 1.0

Metadata_Time_Convention: Local time

Metadata_Security_Information:

M-1270



Biscayne Engineering Company, Inc.
Date of Photo: 09-12-05
View: Looking West along Bridge Road (SR 706)
at I-95 (Well location near driveway at right)

M-1270



Biscayne Engineering Company, Inc.
Date of Photo: 09-12-05
View: Facing Northwest, looking at Well M-1270 and benchmark "M1235 2005"

M-1270



Biscayne Engineering Company, Inc.
Date of Photo: 09-12-05
View: Facing North, Well M-1270 (at left)
and Well M-1235 (at right)

M-1270



Biscayne Engineering Company, Inc.
Date of Photo: 09-12-05
View: Well M-1270

M-1270



Benchmark "M1235 2005"

Elev. = 16.14' (NAVD-88)

**Biscayne Engineering Company, Inc.
Date of Photo: 09-12-05
View: Benchmark "M1235 2005"
(facing West)**

M-1270



Benchmark "M1235 2005"

Elev. = 16.14' (NAVD-88)

Biscayne Engineering Company, Inc.

Date of Photo: 09-12-05

View: Benchmark "M1235 2005"

A. REDERO
T. LOPEZ
N. CEFEDA

#03-77478
S.F.W.M.D
"SITE-A"

8/3/05

(ESTABLISH
ELEV. ON WELL
M1039)

STA	BS	MEAN	HI	FS	MEAN
BM	9.370 7.410 5.450	7.410	22.440 ✓		
TP#1				1.330 0.720 0.110	0.720
SHAKE	8.170 6.690 5.210	6.690	28.410 ✓		
TP#2				10.790 9.350 7.710	9.350
SHAKE	3.810 5.220 0.710	2.260	21.320 ✓		
TP#3				8.920 7.400 5.850	7.400

ELEV	BM ELEV	DESC
	15.03	NGS # AD 6243 FND DISC STAMPED MAR 10 FLDNR. 78.2' FT W. OF US 1 S.E. LANE 450' FT N. OF COUNTY LINE NAVD 83
21.720 ✓		SET CUT NL
		SET CUT NL
19.060 ✓		SET CUT NL
		SET CUT NL
15.920 ✓		SET CUT NL

SAME
CREW

#03-77478
S.F.W.M.D
"SITE-A"

8/3/05

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV.	BM ELEV	DESC
SHAKE	5.540 4.685 3.830	4.685	18.605 ✓					SET CUT NL
TP#4				1.960 1.215 0.470	1.215	17.39 ✓		SET 80 D SPIKE
SHAKE	7.270 6.540 5.810	6.540	23.93 ✓					SET 80 D SPIKE
TP#5				5.500 4.060 2.620	4.260	19.87 ✓		SET 80 D SPIKE
SHAKE	5.585 4.640 3.675	4.64	24.51 ✓					SET 80 D SPIKE
TP#6				3.750 2.755 1.760	2.755	21.755 ✓		SET MAG NL IN TREE STUMP

SAME
CREW

#03-77478
S.F.W.M.D.
"SITE-A"

3/3/05

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN
SHAKE	2.470 2.780 2.490	2.980	24.735		
M1039				2.770 2.555 2.265	2.555
SHAKE	2.350 1.630 0.910	1.630	24.315		
TP # 7				2.555 2.555 2.265	2.555
SHAKE	3.640 2.650 1.660	2.650	24.570		
TP # 8				5.480 7.510 5.280	7.230

ELEV	BM ELEV.	DESC.
		SET MAG NL IN TREE TRUNK
22.685		TOP OF PIPE WELL = M1039
		TOP OF PIPE WELL = M1039
21.760		MAG NL IN TREE TRUNK
		MAG NL IN TREE TRUNK
19.880		SET 80 D SPIKE

SAME
CREW

#03-77478
S. F. W. M. D

8/3/05

"SITE - A"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	5.510 4.070 2.630	4.070	23.750	✓				SET 80 D SPIKE
TP # 9				7.280 6.550 5.820	6.550	17.400	✓	SET 80 D SPIKE
SHAKE	2.340 1.650 0.960	1.650	19.050	✓				SET 80 D SPIKE
TP # 10				6.010 5.120 4.730	5.120	13.930	✓	SET CUT NL
SHAKE	7.130 5.710 4.290	5.710	19.640	✓				SET CUT NL
TP # 11				6.060 6.420 4.780	6.420	13.220	✓	SET CUT NL

2548/03

SAME
CREW

#03-77478
S.F.W.M.D.

"SITE-A"

8/3/05

(ELEV. CONT)

2548/04

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	5.950 4.495 3.040	4.495	17.715 ✓					SET CUT NL
TP#12				6.000 4.780 3.560	4.780	12.935 ✓		SET CUT NL
SHAKE	7.160 5.920 4.680	5.920	18.855 ✓					SET CUT NL
TP#13				11.750 10.050 8.350	10.050	8.805 ✓		SET CUT NL
SHAKE	6.590 5.290 3.990	5.290	14.095 ✓					SET CUT NL
TP#14				7.790 5.845 3.900	5.845	8.250 ✓		SET CUT NL

SAME
CREW

#03-77478
S.F.M.M.D.

8/3/05

"SITE-A"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	BLEN	BM ELEV	DESC
SHAKE	9.620 8.100 6.600	8.700	16.925	✓				SET CUT NL
TP # 18				12.750 10.560 8.370	10.560	6.365	✓	SET CUT NL
SHAKE	7.550 5.310 3.070	5.310	11.675	✓				SET CUT NL
TP # 19				7.750 5.925 3.900	5.825	5.850	✓	SET CUT NL
SHAKE	7.870 6.355 4.840	6.355	12.205	✓				SET CUT NL
TP # 20				5.870 3.870 1.850	3.870	8.335	✓	SET CUT NL

SAME
CREW

#03-77478
S.F.W.M.D.

8/3/05

"SITE-A"

(ELEV CONT)

STA	BS	MEAN	HI	FS	MEAN
SHAKE	7.320 6.385 5.450	6.385	17.720 ✓		

BM				6.040 5.460 4.880	5.460
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BM	3.605 3.425 3.245	3.425	26.110 ✓		
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DISC M1039				3.920 3.740 3.560	3.74
---------------	--	--	--	-------------------------	------

SHAKE	3.320 3.140 2.960	3.140	25.510 ✓		
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BM				3.865 3.755 3.645	3.755
----	--	--	--	-------------------------	-------

2548/07

ELEV	BM ELEV	DESC.
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SET CUT NIL

↓
9.260 9.780
/ /
ERR = 0.020

NGS # A55245
END DISC STAMPED
GCY DOZ 2001
296 W OF W EDGE OF PAV.
COUNTY LINE RD NEAR HEAD W
NAVD 88

22.685 WELL = M1039

22.310 ↓

SET S.F.W.M.D. DISC
STAMPED M1039 2005

↓
21.755 21.755 TP #16 MARY NIL IN STUMP
NO ERROR

SAME
CREW

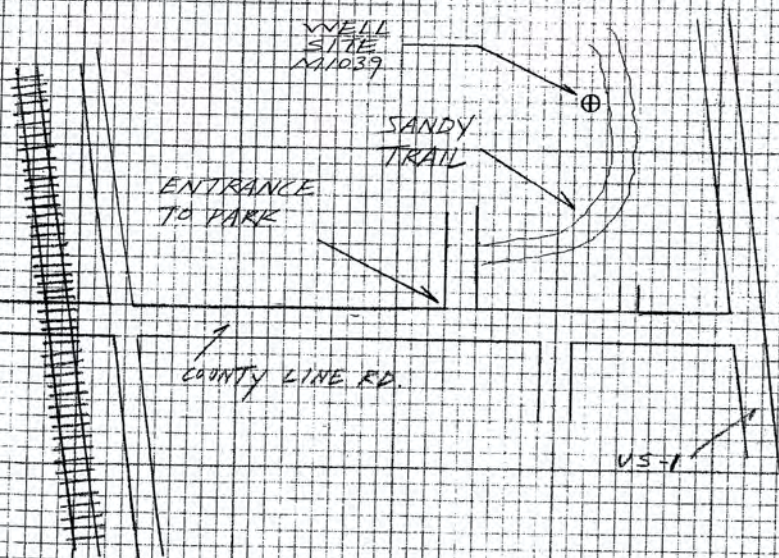
#03-77478
S.F.W.M.D.

(SITE - A
DESCRIPTION)

8/3/05

DIRECTIONS -

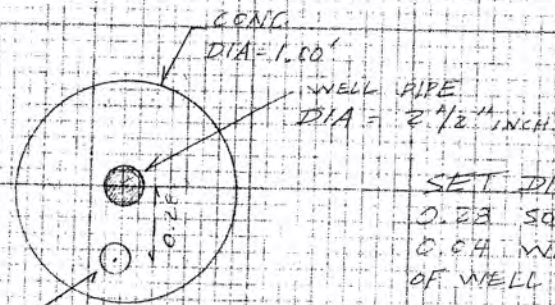
FROM THE INTERSECTION OF
US-1 AND COUNTY LINE RD.
TRAVEL WEST ON COUNTY
LINE RD FOR 0.2 MILES
TO THE ENTRANCE OF TERVESTA
PARK TURN NORTH INTO
PARK AND THEN EAST ONTO A
SANDY TRAIL THAT CIRCLES
AROUND FOR 0.2 MILES THE
WELL IS ON THE LEFT SIDE
OF THE TRAIL



2548/08

SKETCH OF WELL SITE = M1039

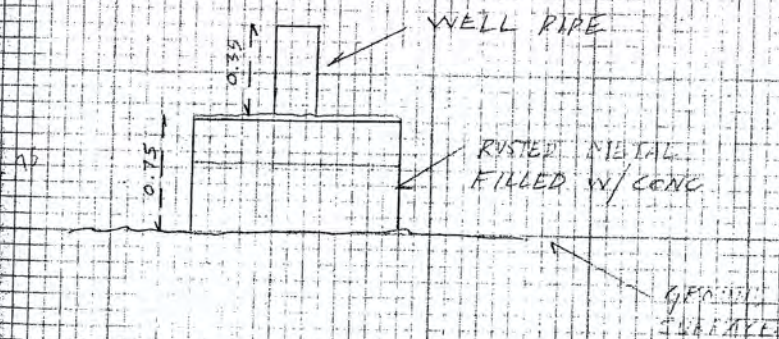
TOP VIEW



SET
S.F.W.M.D.
DISC
STAMPED
M1039 2005

SET DISC
0.23 SOUTH
0.04 WEST
OF WELL PIPE

SIDE VIEW



SAME
CREN

#03-77478
S.F.W.M.D.

8/3/05

"SITE-B"

(ESTABLISH
ELEV ON WELL
M1233)

STA	BS	MEAN HI	FS	MEAN
BM	4.675 4.530 4.385	4.530	12.250	✓
M1233			4.975 4.910 4.845	4.910
SHAKE	5.385 5.325 5.265	5.325	12.665	✓
BM			5.095 4.945 4.795	4.945

2548/09

ELEV	BM ELEV	DESC
7.720		NGS # AJ 5644 END DISC STAMPED B 516 2001 52.50' N. OF PROT. $\frac{1}{4}$ OF SE COUNTY LINE RD AND 4' W. OF PROT. W. EDGE OF EAV. OF SE WOODEN BRIDGE L.M.
7.340		TOP OF PIPE NAVD 88 WELL = M1233
		TOP OF PIPE WELL = M1233
7.720	7.720	NGS # AJ 5644 END BRASS D. NAV D 88

SAME
CREW

#03-77473
S.F.W.M.D.

"SITE-B"

8/3/05

ESTABLISH
ELEV. ON WELL
M1230

STA	BS	MEAN	HI	FS	MEAN
BM	4.790 4.640 4.490	4.640	12.360		
M1230				5.010 4.925 4.840	4.925
SHAKE	5.300 5.215 5.130	5.215	12.650		
BM				5.080 4.930 4.780	4.930

2548/10

ELEV	BM ELEV	DESC
7.720	7.720	NGS # AJ5644 FND DISC. STAMPED 3 516 2001 52.50' N. OF PROJ. $\frac{1}{2}$ OF SE COUNTY LINE RD 4' W. OF PROJ. W. EDGE OF FAV. SE. WOOLEN BRIDGE LN TOP OF PIPE NAVD 89 WELL = M1230
7.435		
		TOP OF PIPE WELL = M1230
7.720	7.720	NGS # AJ 5644 FND BRASS D. NAVD 89

SAME
CREW

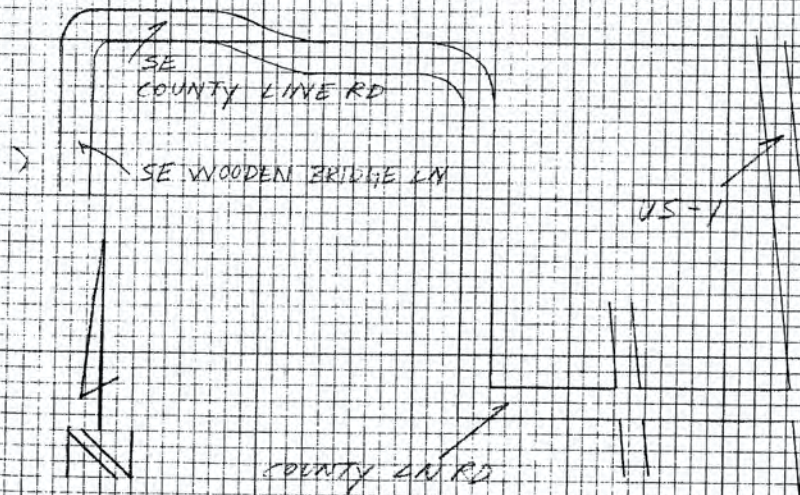
#03-1478
S.F.W.M.D.

(SITE - B
DESCRIPTION)

8/3/05

DIRECTIONS - FROM THE INTERSECTION OF US
AND COUNTY LN RD TRAVEL WEST
ON COUNTY LN RD FOR 1.3 MILE
CONTINUE NORTH FOR 0.9 MILE
AND CONTINUE WEST AGAIN FOR
0.7 MILES ON SE COUNTY LN RD WHERE
IT TURNS SOUTH AND BECOMES
SE WOODEN BRIDGE LN PARK ON SIDE
OF RD AND WALK NORTH INTO WOODS
THE WELLS ARE 96 ± NORTH OF
PROJECTED ϕ OF SE COUNTY LN RD
AND ARE ON LINE WITH THE WEST
EDGE OF PAY. OF SE WOOD BRIDGE LN.

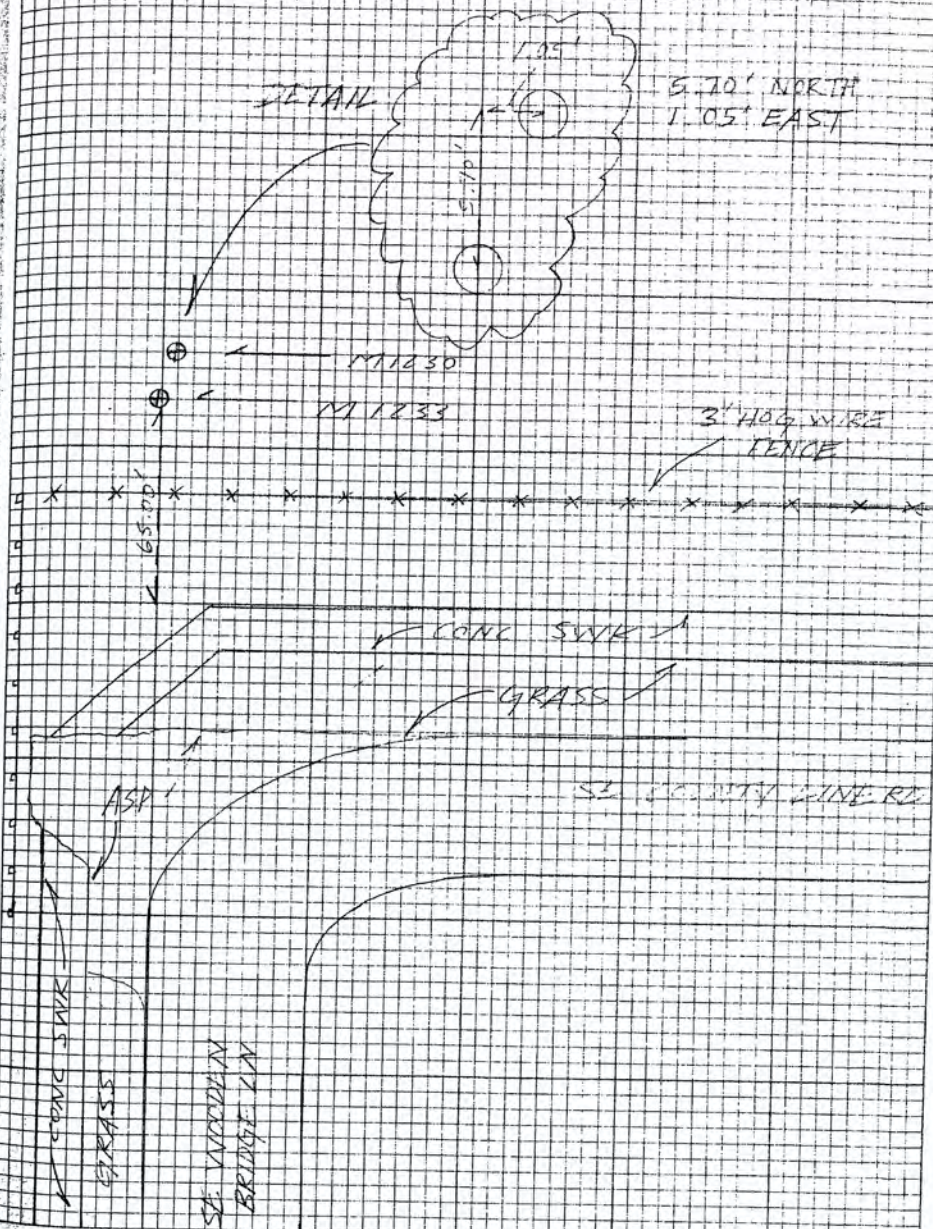
- ⊕ WELL SITE M1230
- ⊕ WELL SITE M1233



2548/11

DETAIL

5.70' NORTH
1.05' EAST



A. REPERO
T. LOPEZ
N. CEPEDA

#03-17478
S.F.W.M.D
"SITE - C"

8/4/05

(ESTABLISH
ELEV. ON WELLS
M1229, M1232)

STA	BS	MEAN	HI	FS	MEAN	BM ELEV	BM ELEV	DESC.
BM	5.860 5.050 4.240	5.050	14.310				9.260	NGS # AJ 5647 FND DISC STAMPED E. 516.2001 AT THE INTERSECTION OF PINE TREE ST AT MARTIN COUNTY & WEST PALM LINE 13 FT NORTH OF WOOD POWER POLE SET CUT NL NAVD 88
TP#1				6.920 5.245 3.570	5.245		9.065	SET CUT NL
SHAKE	6.245 4.755 3.265	4.755	13.820					SET CUT NL
TP#2				5.250 3.869 2.070	3.869		9.960	SET CUT NL
SHAKE	7.000 5.270 3.540	5.270	15.230					SET CUT NL
TP#3				8.720 7.010 5.300	7.010		8.220	SET CUT NL

2543/12

SAME CREW #03-17418 S.F.W.M.D. "SITE-C"

8/4/05

(ELEV CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	EM ELEV	DESC
SHAKE	7.000 5.705 4.390	5.705	13.925 ✓					SET CUT NL
TP#4				6.565 5.065 3.565	5.065	8.860 ✓		SET CUT NL
SHAKE	6.900 4.930 2.960	4.930	13.730 ✓					SET CUT NL
TP#5				7.100 5.395 3.690	5.395	8.395 ✓		SET CUT NL
SHAKE	7.000 5.250 3.500	5.250	13.645 ✓					SET CUT NL
TP#6				5.705 3.705 1.705	3.705	7.940 ✓		SET CUT NL

SAME
CREW

#03-77478
S.F.W.M.D.

2548/14

8/4/05

"SITE-C"

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	6.610 4.555 2.500	4.555	14.495					SET CUT NL
TP # 7				7.710 5.535 3.280	5.525	8.970		SET CUT NL
SHAKE	7.280 5.175 3.070	5.175	14.145					SET CUT NL
TP # 8				11.880 7.550 7.120	7.550	4.595		SET CUT NL
SHAKE	7.1500 5.195 3.240	5.195	9.790					SET CUT NL
TP # 9				3.930 2.180 0.380	2.180	7.610		SET CUT NL

SAME
CREW#03 - 77478
S.F.W.M.D

3/4/05

"SITE-C"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	7.570 6.490 5.410	6.49	14.100					SET CUT NL
TP#10				6.490 5.180 3.870	5.180	8.920		SET CUT NL
SHAKE	5.740 4.705 3.670	4.705	13.625					SET CUT NL
TP #11				5.900 5.000 4.100	5.000	8.625		SET MAG NL & W
SHAKE	4.750 4.300 3.850	4.300	12.925					SET MAG NL & W
M 1232				5.190 4.740 4.290	4.740	8.185		TOP OF PIPE WELL = M1232

SAME
OPEN

#03-77478
S.F.W.M.E.

"SITE - C"

2/4/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	5.380 4.930 4.490	4.930	13.115					TOP OF PIPE WELL 1232
TP #11				5.270 4.850 4.430	4.850	8.265		TOP OF PIPE WELL 1229
SHAKE	4.850 4.450 4.020	4.450	12.715					TOP OF PIPE WELL 1229
TP #12				4.540 4.090 3.640	4.090	8.625		SET MAG NL & W
SHAKE	5.970 5.090 4.210	5.090	13.715					SET MAG NL & W
TP #13				5.850 4.800 3.750	4.800	8.915		SET CUT NL

SAME
CREW

#03-77478
S.F.W.M.D.
SITE - C

8/4/05

(ELEV. CONT.)

STA	ZS	MEAN	HL	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	6.640 5.335 4.030	5.335	14.350					SET CUT NL
-TP#14				7.730 6.645 5.580	6.645	7.605		SET CUT NL
SHAKE	4.150 2.475 0.800	2.475	10.080					SET CUT NL
-TP#15				7.570 5.470 3.410	5.470	4.590		SET CUT NL
SHAKE	11.450 9.175 6.940	9.175	13.785					SET CUT NL
TP#16				7.000 4.820 2.570	4.820	8.965		SET CUT NL

CAME
CREV

#03-77478
S.F. V. M. 2
"SITE-C"

13/18

8/4/05

(ELEV. SCNT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	7.820 5.575 3.330	5.575	14.540					SET CUT NL
TP#17				6.655 4.605 2.555	4.605	9.935		SET CUT NL
SHAKE	6.010 3.790 1.570	3.790	13.725					SET CUT NL
TP#18				6.900 5.330 3.760	5.330	8.575		SET CUT NL
SHAKE	7.370 5.460 3.550	5.460	13.855					SET CUT NL
TP#19				6.700 5.000 2.240	5.000	8.855		SET CUT NL

SAME
CREW

#03-71473
S.F.W.M.L.
"SITE-C"

7/4/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV.	DESC
SHAKE	6.820 5.320 5.870	5.360	14.175					SET CUT NL
TP#20				7.280 5.280 4.690	5.960	8.215		SET CUT NL
SHAKE	7.780 6.340 4.900	6.340	14.555					SET CUT NL
TP#21				9.230 6.920 4.610	6.920	7.635		SET CUT NL
SHAKE	7.520 1.325 0.130	1.325	2.760					SET CUT NL
TP#22				7.290 5.495 3.700	5.495	3.465		SET CUT NL

2542/19

SAME
CREW

#03-77478
S.F.W.M.D.
"SITE - C"

8/4/05

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	6.890 5.270 3.650	5.270	8.735	✓				SET CUT NL
TP# 23				6.680 5.150 3.640	5.760	3.575	✓	SET CUT NL
SHAKE	15.580 13.910 12.24	13.91	17.485	✓				SET CUT NL
TP# 24				10.200 7.700 5.200	7.700	9.785	✓	SET CUT NL
SHAKE	7.620 1.680 0.740	1.680	11.465	✓				SET CUT NL
TP# 25				5.840 4.490 3.140	4.490	6.975	✓	SET CUT NL

SAMIE
CREW

#03-77473
S.F.W.M.D.

" SITE C "

3/4/05

STA	BS	MEAN	FS	MEAN	ELEV	BM ELEV	DESC
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BM	5.160 4.930 4.680	4.720	13.185			8.265	WELL #11227
----	-------------------------	-------	--------	--	--	-------	-------------

DISC				4.930 4.685 4.440	4.690	8.525	
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SET S.F. MARKER
STAMPED 11/12/05

SHAKE	4.720 4.765 4.210	4.465	12.745				
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BM				4.735 4.340 3.935	4.340	8.625	6.615
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NO ERROR
7/11/05

2542/71

SAME
CREW

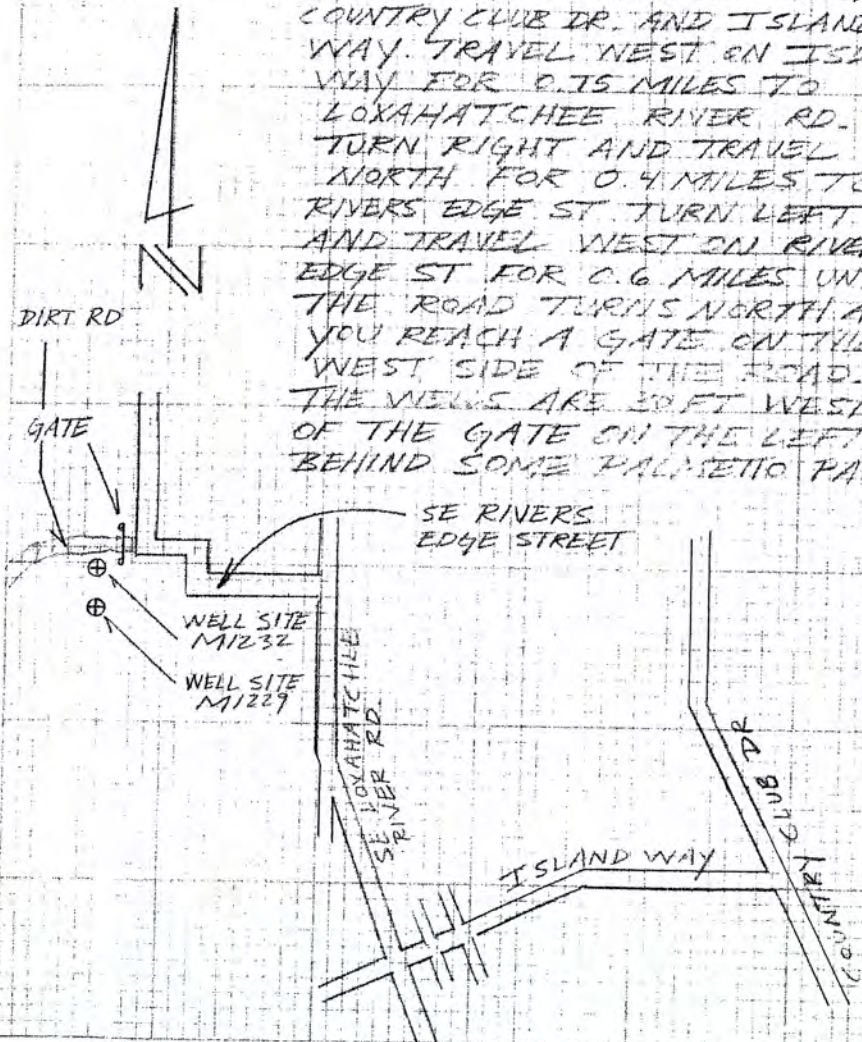
#03-77478
S.F.W.M.D

8/4/05

(SITE-C
DESCRIPTION)

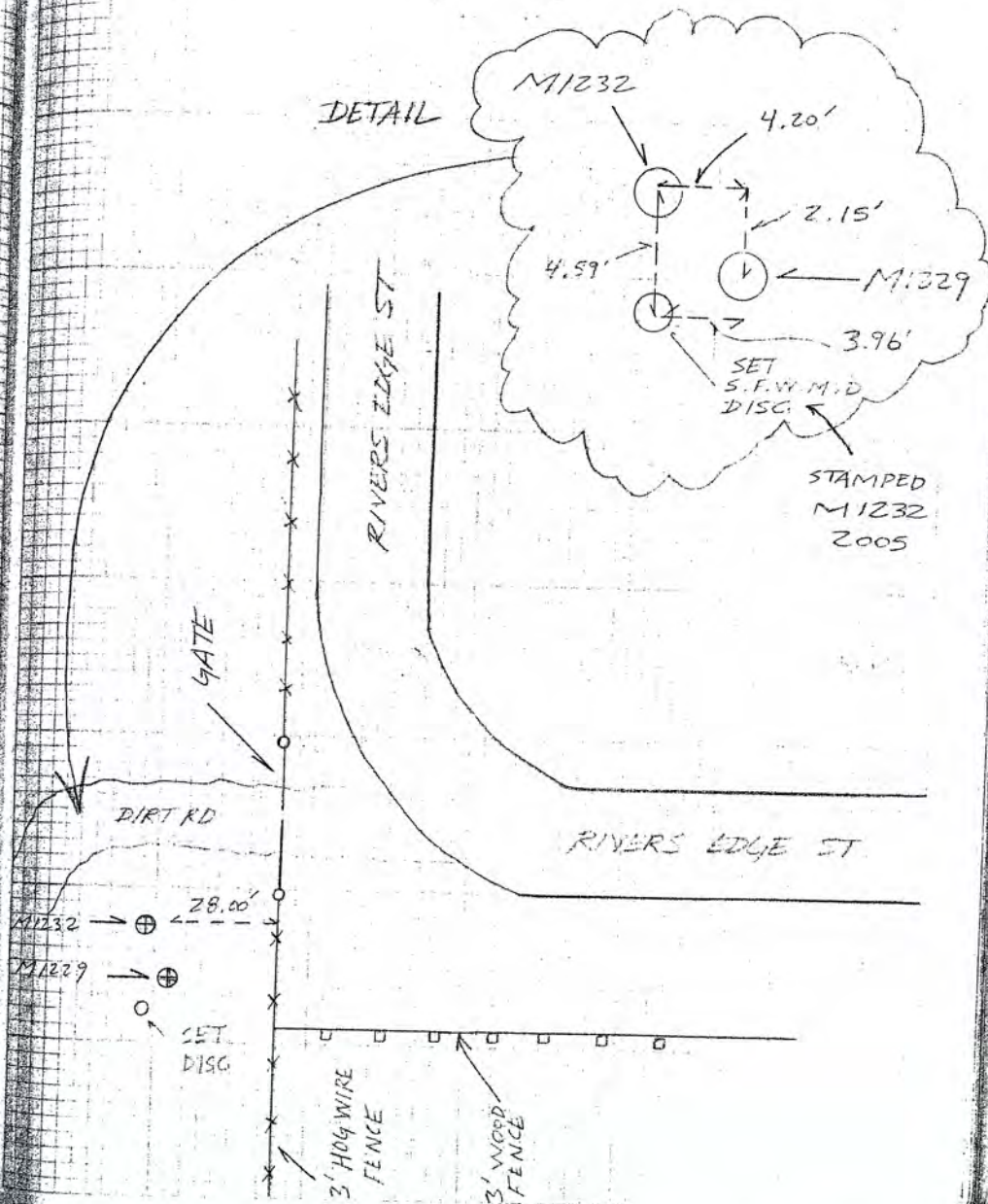
DIRECTIONS -

FROM THE INTERSECTION OF
COUNTRY CLUB DR. AND ISLAND
WAY. TRAVEL WEST ON ISLAND
WAY FOR 0.75 MILES TO
LOXAHATCHEE RIVER RD.
TURN RIGHT AND TRAVEL
NORTH FOR 0.4 MILES TO
RIVERS EDGE ST. TURN LEFT
AND TRAVEL WEST ON RIVERS
EDGE ST FOR 0.6 MILES UNTIL
THE ROAD TURNS NORTH AND
YOU REACH A GATE ON THE
WEST SIDE OF THE ROAD.
THE WELLS ARE 30 FT WEST
OF THE GATE ON THE LEFT
BEHIND SOME PALMETTO PALMS.



2548/23

DETAIL



M1232

4.20'

2.15'

4.59'

M1229

3.96'

SET
S.F.W.M.D
DISC

STAMPED
M1232
2005

GATE

DIRT RD

M1232

28.00'

M1229

SET
DISC

3' HOG WIRE
FENCE

3' WOOD
FENCE

RIVERS EDGE ST

RIVERS EDGE ST

A. PEDRO
T. IOPTE
W. CEBELA

#03-77478
S. F. W. M. E.

"SITE-D9E"

ESTABLISH
ELEV. ON WELLS
M1092; M1044, M. 358

3/2/05

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
	6.570							
BM	5.310	5.310	13.330				7.920	NGS# AF3053 FND LISC STAMPED 0224 1965 0.7 MILES SOUTHEAST FROM AIA AND SOUTHEAST RIVER RD. 20.3' NORTHEAST OF POWER PILE. NAVC 32
	4.050							
M1092				5.930 7.305 6.180	7.305	5.925		*16' PIPE WELL = M1092
	7.351							
SHAKE	6.730 5.610	6.730	12.055					TOP OF PIPE WELL = M1092
TP#1				5.290 3.740 2.370	3.740	8.915		SET CUT NL
SHAKE	7.740 6.150 4.560	6.150	15.065					SET CUT NL
TP#2				6.290 4.705 3.520	4.705	10.160		SET CUT NL

SAME
CREW

#03-77,773
S.F.V.M.D

3/8/05

" SITE-DIE "
(ELEV. CONT)

STA	ES	MEAN	HI	ES	MEAN	ELEV.	BM ELEV	DESC
SHAKE	5.540 4.680 3.820	4.680	14.340					SET CUT NL
M1044				6.480 5.740 5.000	5.740	9.100		TOP OF PIPE WELL - M1044
SHAKE	5.480 4.730	5.480	14.580					TOP OF PIPE WELL - M1044
M1058				6.210 5.780 4.930	5.780	8.850		TOP OF PIPE WELL - M1058
SHAKE	7.330 6.470 5.730	6.470	14.950					TOP OF PIPE WELL - M1058
TP#3				7.160 5.400 3.640	5.400	9.450		SET CUT NL

SAME
CREV

#00.1002
S.F.W.M.D

3/9/5

"SITE 29B"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	EM ELEV	DESC
SHAKE	6.750 5.720 5.710	5.730	14.63					SET CUT NL
TP#4				2.570 1.570 2.570	1.550	10.130		SET CUT NL
SHAKE	2.340 2.330 2.270	6.805	16.935					SET CUT NL
TP#5				4.260 2.495 0.730	2.475	14.440		SET CUT NL
SHAKE	7.510 7.470 5.720	7.470	21.910					SET CUT NL
EM				5.220 3.910 2.600	3.910	18.000	18.000	

NO ERROR

NGS # AF7531
END FLANGE ENCASED STAINLESS
STEEL ROD
STAMPING C403 1971
147.6' NE OF A1A &
1.3' SE OF POWER POLE

SAME
CREW

#03-77478
S.F.W.M.D.

8/2/05

" SITE - E "

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV.	DESC
BM	6.160 5.295 4.430	5.295	14.395				9.100	WELL = M1044
DISC M1044				6.010 5.135 4.260	5.135	9.260		SET S.F.W.M.D. DISC STAMPED M1044 2005
SHAKE	6.300 5.430 4.560	5.430	14.690					" "
BM				5.260 4.530 3.800	4.530	10.160	10.160	TP # 2 CUT NL

No ERROR

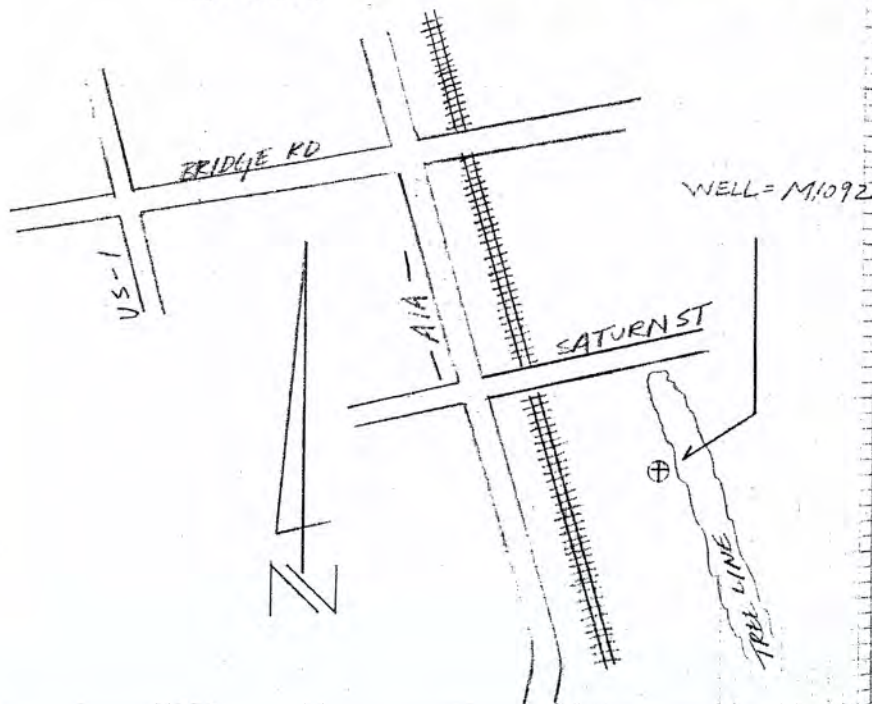
SAME
CPEW

#03-77478
S.F.W.M.D

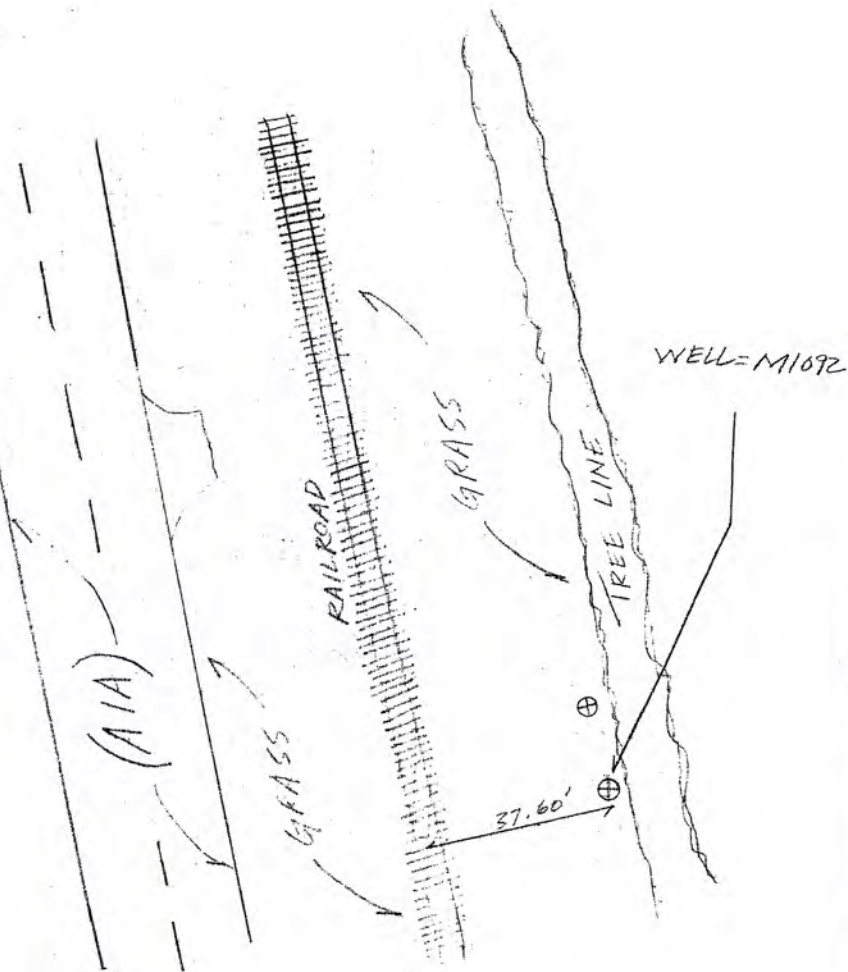
8/9/05

(SITE-D
DESCRIPTION)

DIRECTIONS - FROM THE INTERSECTION OF
BRIDGE RD. AND US-1 TRAVEL
EAST ON BRIDGE RD. FOR 0.35
MILES TO AIA. TURN SOUTH ON
AIA AND TRAVEL FOR 5.7 MILES.
PARK ON EAST SIDE OF ROAD.
THE WELL IS 37.60 FT EAST
OF CENTER OF RAILROAD TRACKS
AT THE BASE OF TREE LINE
BORDERING A TWO STORY BROWN
HOUSE.



2548/28



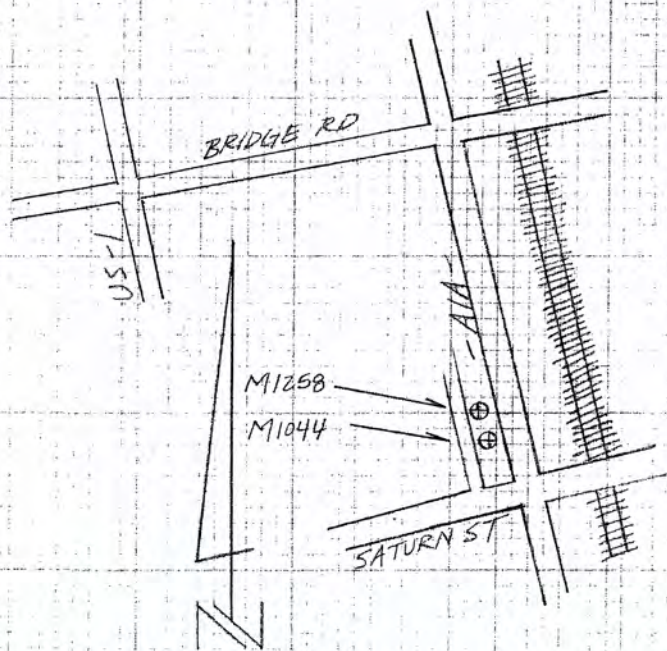
SAME
CREW

#03-77478
S.F.W.M.D.

8/8/05

(SITE-E
DESCRIPTION)

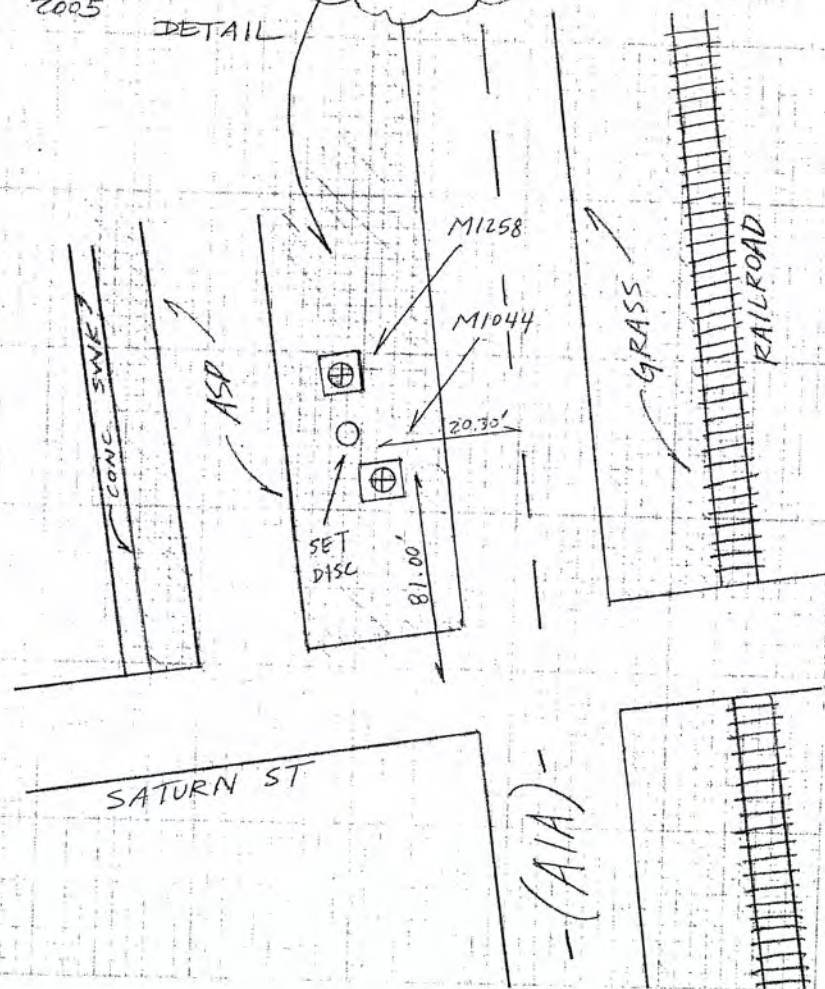
DIRECTIONS - FROM THE INTERSECTION OF
BRIDGE RD AND US-1 TRAVEL
EAST ON BRIDGE RD. FOR 0.35
MILES TO AIA. TURN SOUTH
AND TRAVEL FOR 0.5 MILES
TO SATURN ST. WELLS ARE
JUST NORTH OF SATURN ST.
ON THE WEST SIDE OF AIA.



2548/29

STAMPED
M1044
2005

DETAIL



SAME
CREW

#03-77475
S.F.W.M.D.
"SITE-F"

8/8/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	7.000 7.570 6.180	7.570	21.995					TOP OF PIPE WELL = M1057
TP#3				2.740 1.745 0.550	1.745	20.250		SET CUT NL
SHAKE	6.790 6.420 6.050	6.420	26.670					SET CUT NL
BM				6.250 5.600 4.950	5.600	21.070	21.040	NGS # 6781 FND DISC STAMPED PINE 1929 NO3 1980. 33.3' NW OF ϕ OF SE GROSSRIP ST. 89.6' SW OF A1A ϕ . 0.7' SE OF WITNESS POST. MAY 03

ERR = 0.030

SAME
CREW

#03-77478
S.F.W.M.D.
"SITE - F"

8/8/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
BM	4.406 4.080 3.760	4.030	18.485 ✓				14.405	WELL = M1057
DISC M1057				4.390 4.160 3.930	4.160	14.325 ✓		SET S.F.W.M.D DISC STAMPED = M1057 2005
SHAKE	4.470 4.230 3.990	4.230	18.555 ✓					" "
BM				6.670 6.270 5.870	6.270	12.285	12.285	TP#2 MAG N.E.W.

NO ERROR

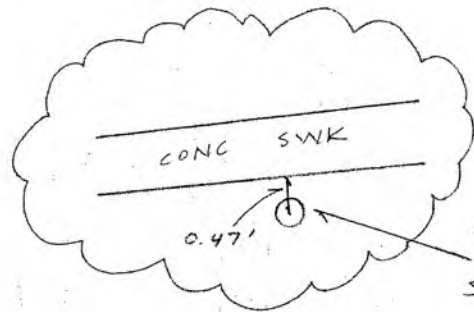
SAME
CREW

#03-77478
S.F.W.M.D.

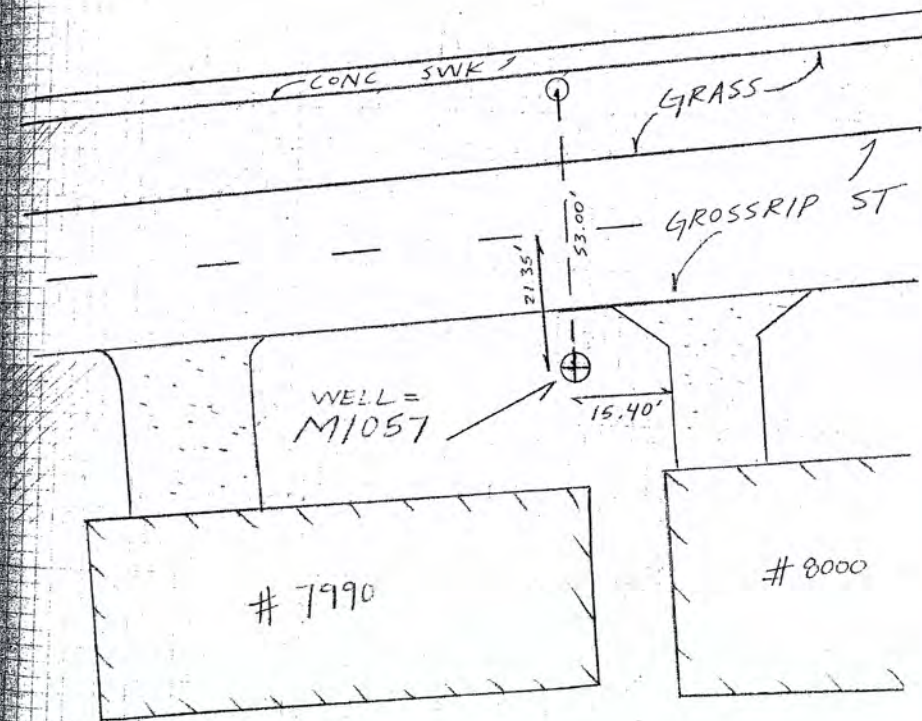
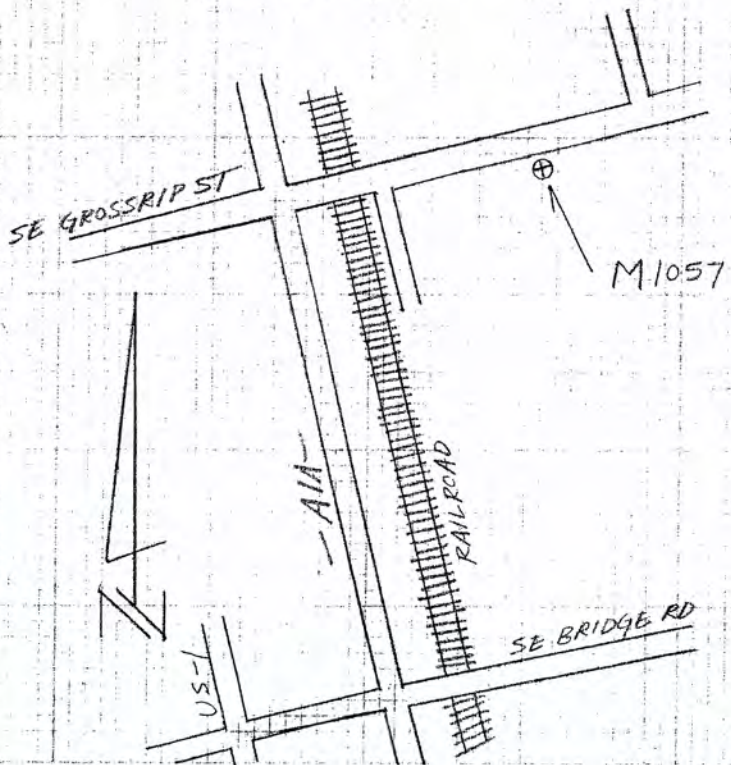
3/8/05

(SITE - F
DESCRIPTION)

DIRECTIONS - FROM THE INTERSECTION OF US-1 AND
BRIDGE RD. TRAVEL EAST FOR 0.35M
TO AIA. TURN LEFT AND TRAVEL
NORTH ON AIA FOR 2.5 MILES
TO GROSSRIP ST. AT GROSSRIP
STREET TURN RIGHT AND
TRAVEL EAST FOR 0.15 MILES
THE WELL IS ON SOUTH SIDE
OF ROAD IN FRONT OF HOUSE
7990.



SET S.F.W.M.D
DISC
STAMPED
M1057 2005



A. REIDERS
T. LOPEZ
C. CHESTER

#03-77478
S.F.W.M.I.
"SITE - 4"

8/15/05

(ESTABLISH
ELEV ON WELL=
141269)



STA	BS	MEAN	HI	FS	MEAN	ELEV	BM	ELEV	DESC
BM	4.160 3.320 2.480	3.320	20.950				17.630		NGS# 135612 FIND DISC SURVEY POINT 2001 250' S. OF TWIN RIVERS MOBILE HOME PARK ENTRANCE 3.9' NORTHWEST OF HOWLER SOLE. NAV. 83
TP #1				5.920 4.635 3.350	4.635	16.315			SET CUT NL
SHAKE	7.320 5.845 4.370	5.845	22.160						SET CUT NL
TP #2				6.010 4.600 3.190	4.600	17.560			SET CUT NL
SHAKE	7.470 5.730 3.990	5.730	23.290						SET CUT NL
TP #3				5.415 4.125 2.835	4.125	19.165			SET CUT NL

SAME
CRIV.

#03-77478
S.F.W.M.D.
"SITE - G"

8/15/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	6.045 5.745 5.445	5.745	24.910					SET CUT NL
M1269				7.370 6.915 6.460	6.915	17.995		TOP OF PIPE WELL = M1269
SHAKE	7.630 6.440 5.250	6.440	24.435					" "
TP # 4				6.420 4.800 3.130	4.800	19.635		SET CUT NL
SHAKE	6.660 4.890 3.120	4.890	24.525					SET CUT NL
TP # 5				6.900 5.610 4.320	5.610	18.915		SET CUT NL

SAME
CREW

#03-77478
S.F.W.M.D.
"SITE-G"

8/15/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	5.760 4.180 2.600	4.180	23.095	✓				SET CUT NL
TP#6				6.800 5.290 3.780	5.290	17.805	✓	SET CUT NL
SHAKE	6.390 4.630 2.870	4.630	22.435	✓				SET CUT NL
TP#7				6.800 5.060 3.320	5.060	17.375	✓	SET CUT NL
SHAKE	6.480 4.975 3.470	4.975	22.350	✓				SET CUT NL
TP#8				6.370 4.975 3.620	4.975	17.355	✓	SET CUT NL

540/36

SAME
CREW

#03-77478
S.F.W.M.D.

2548/37

8/15/05

"SITE - G"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN ELEV	BM ELEV	DESC
SHAKE	9.380 8.125 6.870	8.125	25.480 ✓				SET CUT NL

TP# 9				2.450 1.560 0.670	1.560	23.920 ✓	SET CUT NL
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SHAKE	4.780 4.520 4.260	4.520	28.440 ✓				SET CUT NL
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BM				6.170 5.925 5.680	5.925	22.515 22.480	NGS# AJ 5619 FND DISC STAMPED LS17 200/ 180' NORTHWEST FROM ϕ OF OSPREY ST. 11.2' NORTHEAST OF BARBED WIRE FENCE. NAVD 88
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ERR = 0.035 ✓

SAME
CREW

#03-77473
S.F.W.M.D.
"SITE-4"

9/15/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	EM ELEV	DESC
	6.995							
IM	6.310	6.310	24.605				17.995	WELL = M1269
	6.785							

DISC
M1269

6.800
6.270
5.720

6.270

18.315

SET S.F.W.M.D. DISC
STAMPED M1269

	6.800							
SHAKE	6.460	6.460	24.775					
	6.120							

IM

6.070
5.610
5.150

5.610

19.165

19.145

NO ERROR

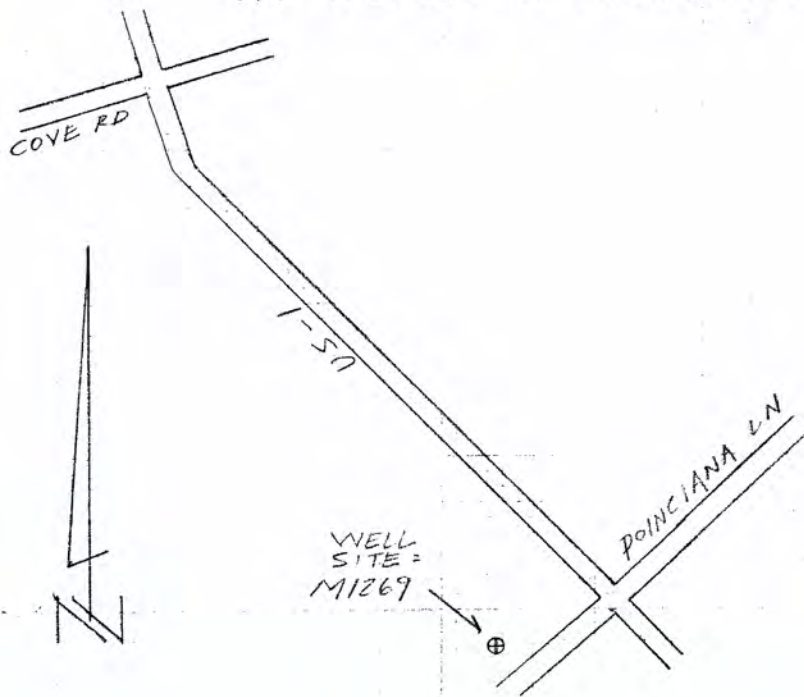
SAME
CREW

#03-77478
S.F.W.M.D.

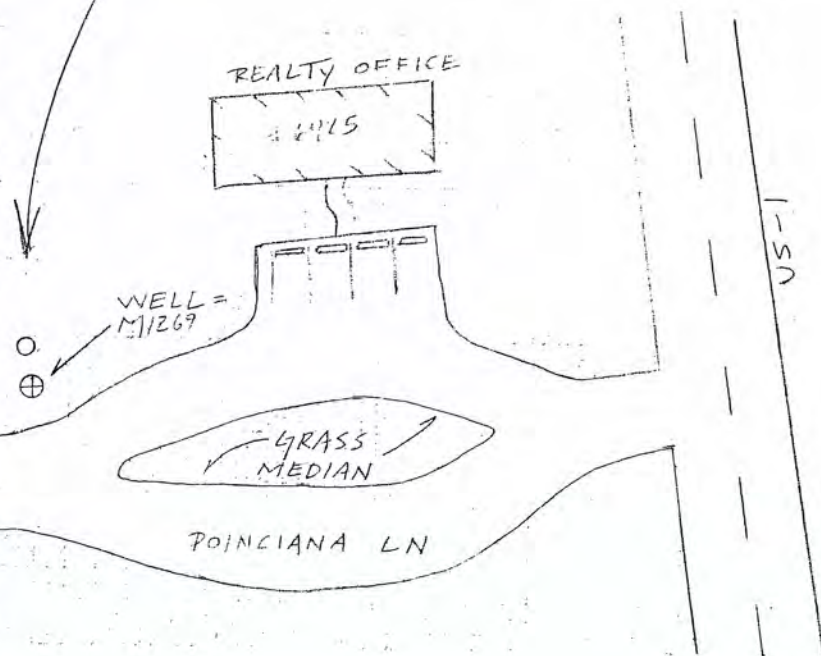
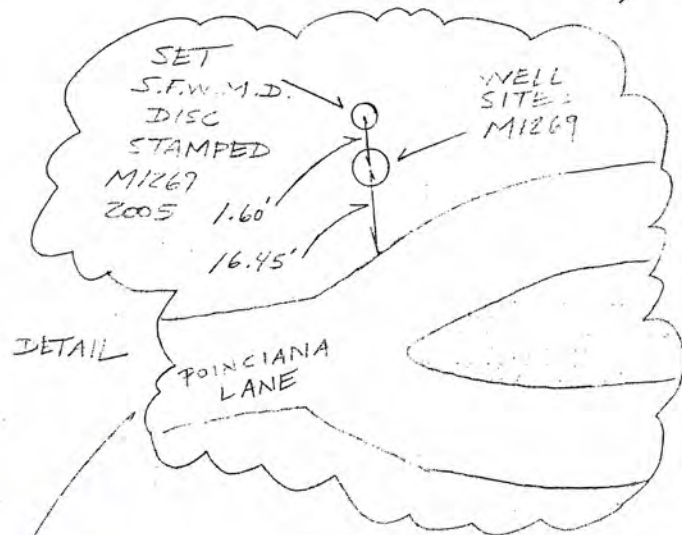
(SITE-G
DESCRIPTION)

8/15/05

DIRECTIONS - FROM THE INTERSECTION OF
US-1 AND COVE RD. TRAVEL
SOUTH ON US-1 FOR 3.1 MILES
TO POINCIANA LANE. TURN
RIGHT AND TRAVEL WEST.
THE WELL IS ON NORTH SIDE
OF POINCIANA LANE RIGHT
AFTER YOU PASS REALTY OFFICE
AT THE END OF MEDIAN STRIP.



2548/39



A. REJERO
T. LOPEZ
A. SANTIANA

#03-7747A
S. F. W. M. D.
"SITE - H"

5/18/05

ESTABLISHED
ELEV ON WELLS
19123E, 19127D

STA	BS	MEAN	HI	FS	MEAN	ELEV	3M ELEV	DESC
BM	4.860 4.320 3.780	4.320	45.75 4.575				✓ 41.430	NGS # AC5315 T277 BRASS STAMPED I 95 BY A 31 BT MMS. IN PLACE AT N. EDGE OF BRIDGE IN CONC. GUTTER 9.5' NORTH OF THE NW CORNER OF EXTERIOR BRIDGE. NAVD 88
TP#1				16.540 16.185 15.930	15.215	29.715	✓	SET 3" I WARE
SHAPE	3.010 2.850 2.690	2.850	32.565	✓				SET 3" I WARE
TP#2				14.630 14.310 13.990	14.310	18.255	✓	SET CUT NL
SHAPE	7.360 5.770 4.550	5.770	24.225	✓				SET CUT NL
TP#3				7.590 5.730 3.870	5.730	18.495	✓	SET CUT NL

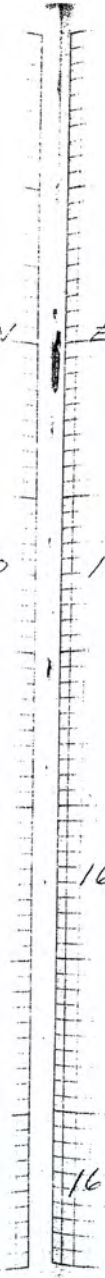
SAME
CFLV

#03-71775
S.F.W. M.D.
"SITE - 11"

8/18/05

(ELEV CUT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	7.070 5.475 3.930	5.475	23.970					SET CUT NL
TP#4				7.360 5.750 4.140	5.750	18.220		SET CUT NL
SHAKE	7.300 6.410 5.520	6.410	24.630					SET CUT NL
DISC M1235				8.940 8.490 8.040	8.490	16.140		SET S.F.W. M.D. BRASS D. STAMPED M1235 2005
SHAKE	4.680 4.220 3.760	4.220	20.36					
M1235				3.770 3.975 3.370	3.975	16.785		WELL = M1235



SAME
CREST

3-11-16
11.1.2.2
11.1.2.2

3/13/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	SET
SHAKE	3.91 3.91	3.91	20.695					WELL = M1235
M1270				5.23 5.23	5.23	15.165		WELL = M1270
SHAKE	5.240 5.240 5.060	5.240	20.405					WELL = M1270
TP415				3.550 3.530 3.510	3.530	17.375		SET CUT NL
SHAKE	7.910 7.390 6.870	7.390	24.765					SET CUT NL
TP416				7.390 6.560 5.730	6.560	18.215		SET CUT NL

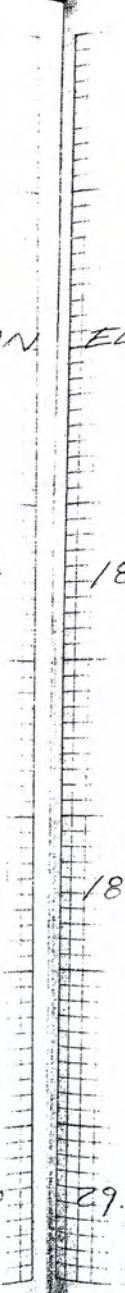
SAME
CREW

#03-77478
S.F.W.M.E.
"SITE-H"

8/15/05

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	7.260 5.790 4.320	5.790	24.005					SET CUT NL
TP#7				7.250 5.510 3.770	5.510	18.495		SET CUT NL
SHAKE	6.920 5.480 4.040	5.480	23.975					SET CUT NL
TP#8				7.510 5.710 3.910	5.710	18.265		SET CUT NL
SHAKE	13.030 12.745 12.460	12.745	31.010					SET CUT NL
TP#9				1.440 1.290 1.140	1.290	29.720		SET 60 D SPIKE



SAME
CREW

#03-77478
S.F.W.M.D.
"SITE-H"

3/18/05

(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
-----	----	------	----	----	------	------	------------	------

	18.210							
SHAKE	17.750	17.750	47.470					
	17.290							

SET 80 D SPIKE

BM

5.705
5.445
5.185

5.445

42.025 42.000

ERR = 0.025

NGS # ACS343 FOOT BRASS I.D.
STAMPED I 95 89 A 24
IN MEDIAN AT NORTH END OF
BRIDGE. 4.6' N. OF THE N.
CONC. GUARDRAIL BETWEEN
N. AND S. LANES.
NAVD 88.

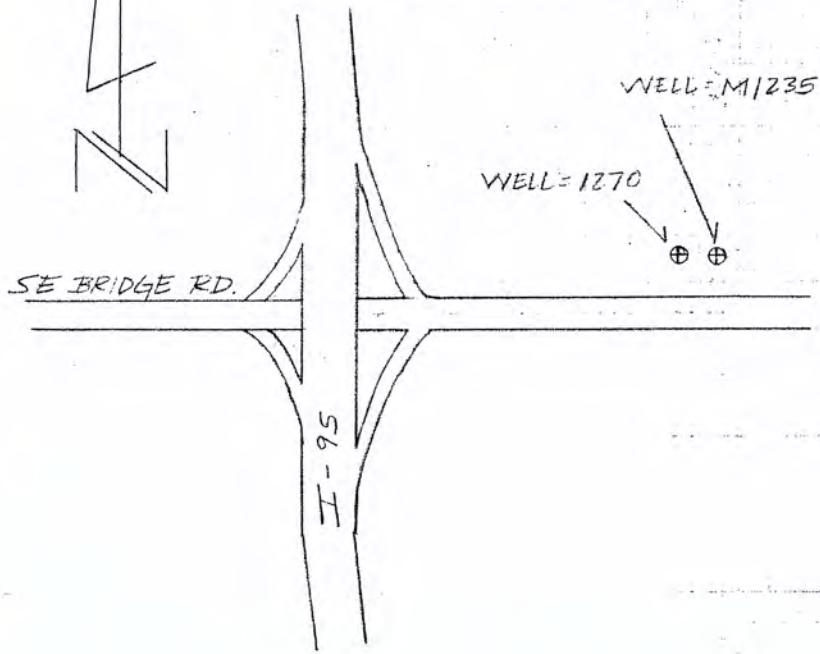
SAME
CREW

#03-77478
S.F.W.M.D

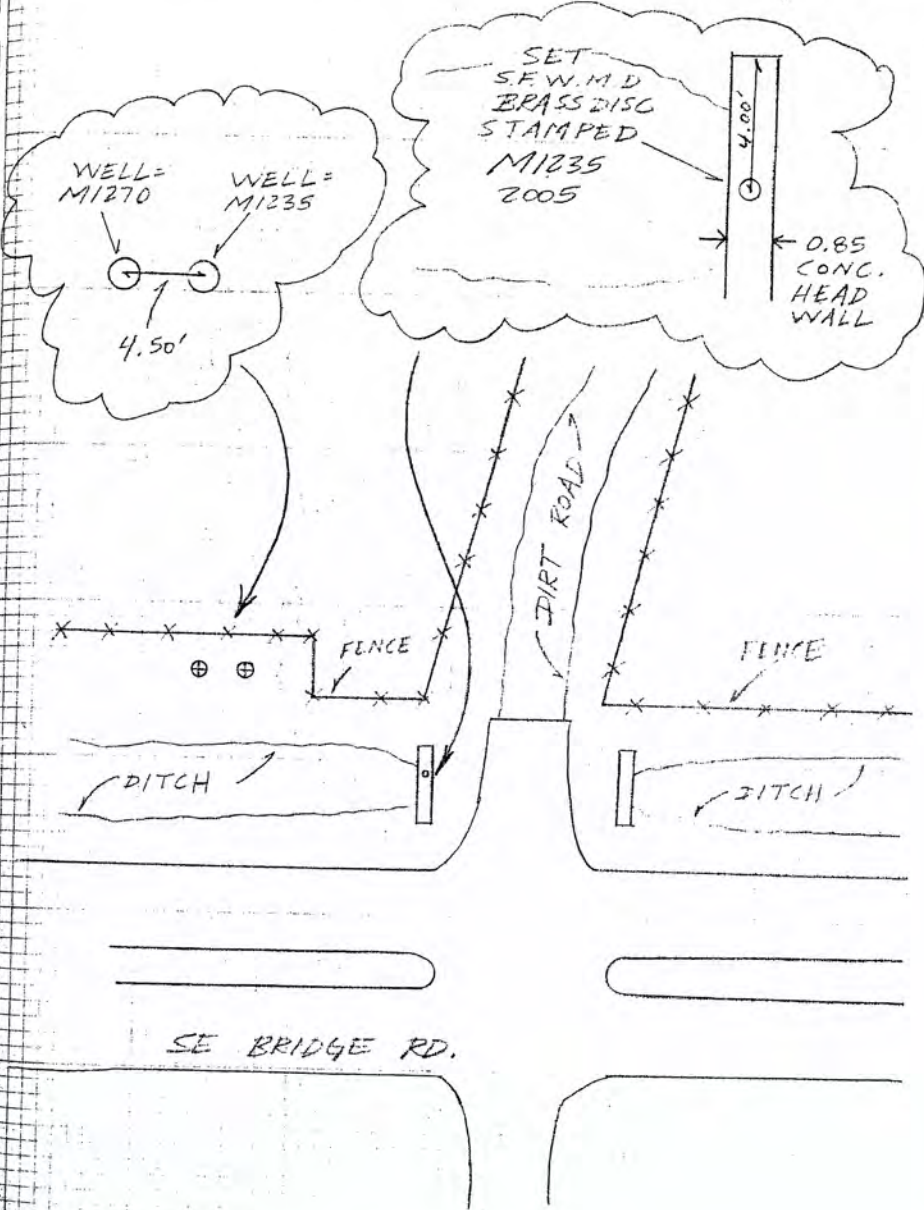
8/18/05

(SITE - H
DESCRIPTION)

DIRECTIONS - FROM THE INTERSECTION OF
I-95 AND BRIDGE RD. TRAVEL
EAST ON BRIDGE RD. FOR 0.3
MILES. TURN NORTH ON
DIRT RD AND PARK IN BETWEEN
DITCH AND FENCE LINE.
THE WELL IS ON THE NORTH
SIDE OF THE ACCESS RD. AND
67' WEST OF DIRT RD.



2548 / 45



A. REBERS
T. LOPEZ
A. LOPEZ

#03-111478
S.F.W.M.S.

"SITE - I"

3/19/05

(ESTABLISH
ELEV ON WELL =
M1081)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
	8.620							
BM	7.140	7.140	32.270				25.130	NGS# AJ8248 FND DISC STAMPED NS22 2001 CERP 48.6 N. OF E OF KANNER RD 37.0 S. OF POWER POLE W/ GUY WIRE ON W. SIDE OF GATE. NAV83
	5.760							
				6.590				
TP# 1				5.035	5.035	27.235		SET CUT NL
				3.480				
	6.150							
SHAKE	5.255	5.255	32.490					SET CUT NL
	4.360							
				5.075				
M1081				4.665	4.665	27.825		WELL M1081
				4.195				
	4.630							
SHAKE	4.250	4.250	32.075					SET CUT NL
	3.350							
				5.730				
TP# 2				4.840	4.840	27.235		SET CUT NL
				3.750				

SAME
CREW#03-77478
S.F.W.M.D

8/19/05

"SITE - II"

(ELEV. CONT)

STA	BS	MEAN	HL	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	7.000 5.250 3.500	5.250	32.485					SET CUT NL
TP# 3				7.060 5.275 3.530	5.295	27.190		SET CUT NL
SHAKE	7.570 5.300 3.230	5.300	32.490					SET CUT NL
TP# 4				7.760 5.560 3.360	5.560	26.930		SET CUT NL
SHAKE	8.200 6.095 3.990	6.095	33.025					SET CUT NL
TP# 5				7.030 4.825 2.620	4.825	28.200		SET CUT NL

SAME
CREW

#03-77478
S. F. V. M. D

" SITE - I "

8/19/05

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	6.520 4.190 1.860	4.190	32.390 ✓					SET CUT NL
TP# 6				7.450 5.210 2.970	5.210	27.180 ✓		SET CUT NL
SHAKE	7.460 4.720 1.980	4.720	31.900 ✓					SET CUT NL
TP# 7				7.000 4.945 2.890	4.945	26.955 ✓		SET CUT NL
SHAKE	7.170 5.330 3.490	5.330	32.785 ✓					SET CUT NL
TP# 8				7.640 5.370 3.100	5.370	26.915 ✓		SET CUT NL

SAME
CREW

#03-77478
S.F.W.M.D.

2543 / 49

8/19/05

"SITE-I"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN
SHAKE	6.620 4.800 2.980	4.800	31.715	✓	

BM

8.050	
6.810	6.810
5.570	

ELEV.	BM ELEV.	DESC
-------	-------------	------

SET CUT NL

24.905	24.870	NGS # AJ8247 FND FLANGE ENCASED ROD STAMPING M 522 2001 CERP 0.2 MILES WEST OF ENTRANCE TO PAYSON PARK, 120' S. OF ☐ OF ROAD, 4.0' NORTH OF WOODEN FENCE. NAVL 88
--------	--------	--

ERR = 0.035

A. KLEBER
A. LOPEZ
M. MOYA

7/2/05

#03-1715
S.F. 1715
"SITE II"

(ELEVATION)

STA	BS	INSTR	HI	SP	NEW
M1081	11.005 4.050 2.055		4.050	31.875	
2150 M1081				6.750 6.730 6.480	6.730
SHAKE	6.900 6.570 6.240		6.570	31.715	
TP # 1				5.110 4.450 3.850	4.450

2548/50

BM
ELEV
DESC

27.825 WELL SITE = M1081

25.145 ✓

SET S.F. W.M.D. BRAND
STAMPED M108 2005

||

||

27.235 27.235

OUT NL

NO ERROR ✓

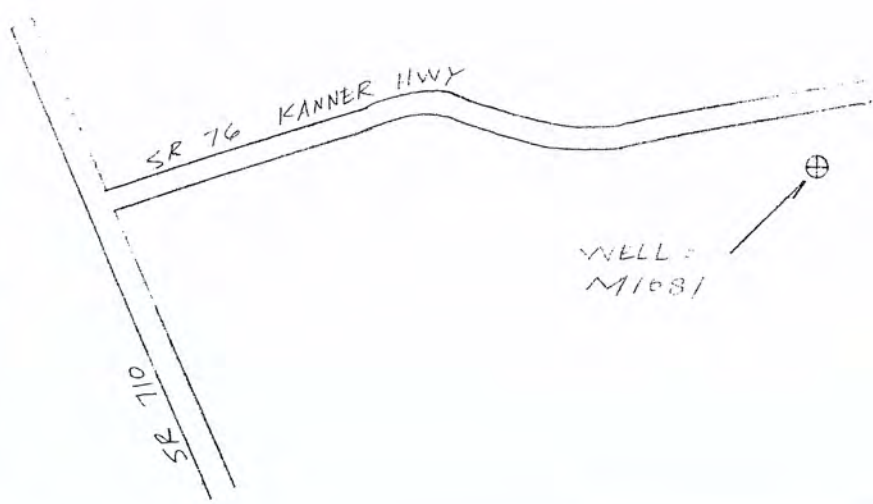
SAME
CREW

9/2/05

#03-77478
S.F.W.M.D.

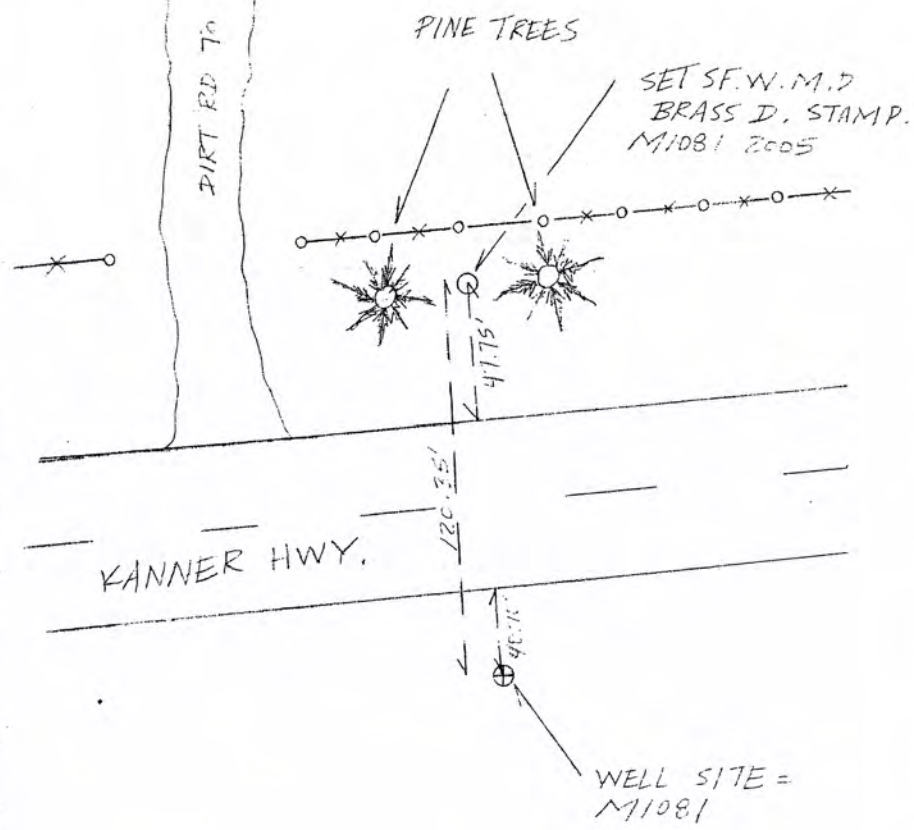
(SITE - II
DESCRIPTION)

DIRECTIONS - FROM THE INTERSECTION
OF BEEHIVE HWY (SR 710) AND
KANNER HWY (SR 76) TRAVEL
EAST ON KANNER HWY FOR
5.35 MILES. THE WELL IS TO
THE RIGHT IN THE SOUTHERN
ROADSIDE EASEMENT, DIRECTLY
ACROSS FROM HOUSE # 5625.
ABOUT 45.7' SOUTH OF EP.



2549/51

5295 # 25001 TO HOUSE # 5625



SAME
OPEN

#027473
S.F. W.M.E.
" SITE - I "

7/2/05

(ESTABLISH
ELEV. ON WELL
M1045)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
	5.755							
BM1	5.010	5.010	30.740				25.730	N45 # AJ0851 FIND MARK # 547 40 EAST END OF TIE CR TO AND CR TO 30.4' N OF & S 110 17.5' S OF TIE TO TIE MARK 39
	3.270							SET CUT NL
TF#1				5.540	4.090	26.650		
				4.270				
				3.640				
SHAPE	5.970	4.340	30.970					SET CUT NL
	4.340							
	3.760							
TF#2				5.200	4.220	26.630		SET CUT NL
				4.380				
				3.410				
SHAPE	4.510	4.135	30.765					SET CUT NL
	4.135							
	3.760							
M1045				6.710	6.715	24.450		TOP OF PIPE WELL M1045
				5.215				
				5.920				

SAME
CREW

APPROXIMATE
ELEVATION

"SITE - J"

3.0.105

ELEV. DATA

STA	BS	MEAN	HI	FS	MEAN
SHAKE	6.971 6.478 6.071	6.478	30.920		

ZM
ELEV ELEV ZEGG

TOP OF PIPE WELL = 11045

TP # 3				4.665 4.285 3.905	4.285
--------	--	--	--	-------------------------	-------

26.635 ✓

SET CUT NL

SHAKE	6.080 4.535 3.050	4.535	31.170		
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SET CUT NL

TP # 4				5.960 4.530 3.100	4.530
--------	--	--	--	-------------------------	-------

26.645 ✓

SET CUT NL

SHAKE	5.790 4.420 2.850	4.420	31.060		
-------	-------------------------	-------	--------	--	--

SET CUT NL

TP # 5				5.720 4.285 2.850	4.285
--------	--	--	--	-------------------------	-------

26.775 ✓

SET CUT NL

SAME
CPLV.

#03-TTTR
S.F.W.M.D.

2548 / 54

9/2/05

"SITE-J"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	5.950 4.440 2.930	4.440	31.215	✓				SET CUT NL
TP # 6				5.860 4.340 2.200	4.340	26.875	✓	SET CUT NL
SHAKE	6.130 4.400 2.670	4.400	31.275	✓				SET CUT NL
TP # 7				6.070 4.505 2.940	4.505	26.770	✓	SET CUT NL
SHAKE	6.070 4.370 2.670	4.370	31.140	✓				SET CUT NL
TP # 8				6.320 4.465 2.610	4.465	26.675	✓	SET CUT NL

SAME
SITE

#03-77473
S.F.W.M.E

9/2/05

"SITE J"

(ELEV. CONT)

STA	IS	MEAN	HL	FS	MEAN	ELEV	BM ELEV	DESC
SHAKE	6.37 4.45 2.53	4.450	31.125					SET CUT NL
TP# 9				6.200 4.470 2.740	4.470	26.655	✓	SET CUT NL
SHAKE	6.380 4.340 2.300	4.340	30.995					SET CUT NL
TP# 10				6.150 4.560 2.970	4.560	26.435	✓	SET CUT NL
SHAKE	6.190 4.375 2.500	4.395	30.830					SET CUT NL
TP# 11				5.660 4.215 2.770	4.215	26.615	✓	SET CUT NL

SAME
C.P.E.M.

#03-77478
S. F. W. M. D.

2548/50

7/3/35

"SITE - J"

(ELEV. CONT)

STA	BS	MEAN	HI	FS	MEAN	LLEV	BM ELEV	DESC
SHAKE	6.570 4.415 2.760	4.415	31.030					SET CUT NL

TP#12				5.120 4.500 3.270	4.500	26.530		SET CUT NL
-------	--	--	--	-------------------------	-------	--------	--	------------

SHAKE	5.736 4.210 2.690	4.210	30.740					SET CUT ALL
-------	-------------------------	-------	--------	--	--	--	--	-------------

BM				7.440 5.880 4.320	5.880	24.820	24.880	
----	--	--	--	-------------------------	-------	--------	--------	--

ERR = 0.020

NGS# AJ8886 FND FLANGE
ENCASED FOR STAMP. E 217
GO EAST FOR 5 MILES FROM
INTER. OF SR 710 AND SR
TO POINT N.E. OF $\frac{1}{4}$ OF RD.
11.4' S. OF WITNESS POST
NAME EB.

A. FEDER
T. LOPEZ
M. MOYA

#03-77478
S.F.W.M.D

" SITE - J "

9/6/05

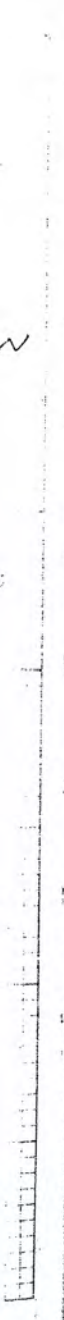
(ELEV. CONT.)

STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESC
BM	6.550 6.140 5.730	6.140	30.590				24.450	TOP OF PIPE = M1045

DISC M1045				5.435 5.230 5.165	5.289	25.305		SET S.F.W.M.D BRASS IN. STAMPED M1045 2005
---------------	--	--	--	-------------------------	-------	--------	--	---

SHAKE	5.910 5.735 5.660	5.735	31.070					" "
-------	-------------------------	-------	--------	--	--	--	--	-----

BM				4.670 4.460 4.250	4.430	26.630	26.630	TOP SET CUT NL NO ERROR
----	--	--	--	-------------------------	-------	--------	--------	----------------------------



SAME
CREW

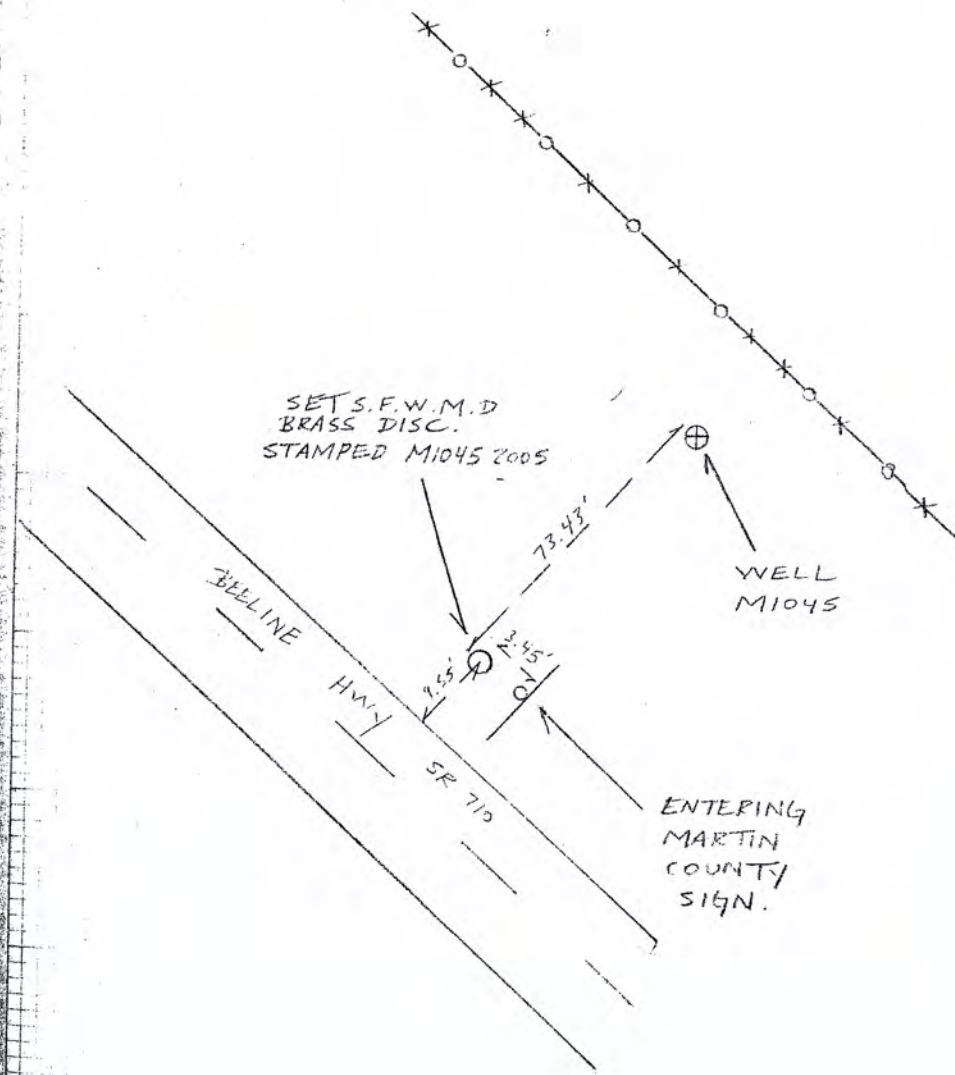
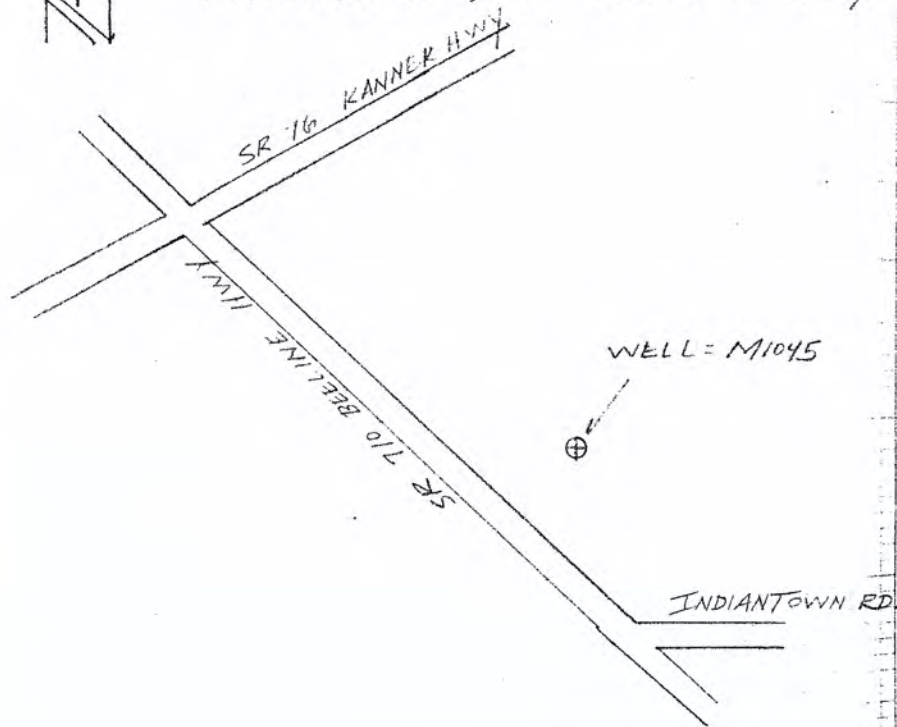
#03-77478
S.F.W.M.D.

2548 / 58

9/6/05

(SITE - J
DESCRIPTION)

DIRECTIONS - FROM THE INTERSECTION
OF BEELINE HWY (SR 710)
AND KANNER HWY (SR 16),
TRAVEL SOUTHEAST ON
BEELINE HWY FOR 6.05 MILES.
THE WELL IS ON THE LEFT
BY THE SIGN, ENTERING
MARTIN COUNTY, 83.00' FT.
NORTHEAST OF EDGE OF
PAVEMENT, OF BEELINE HWY.

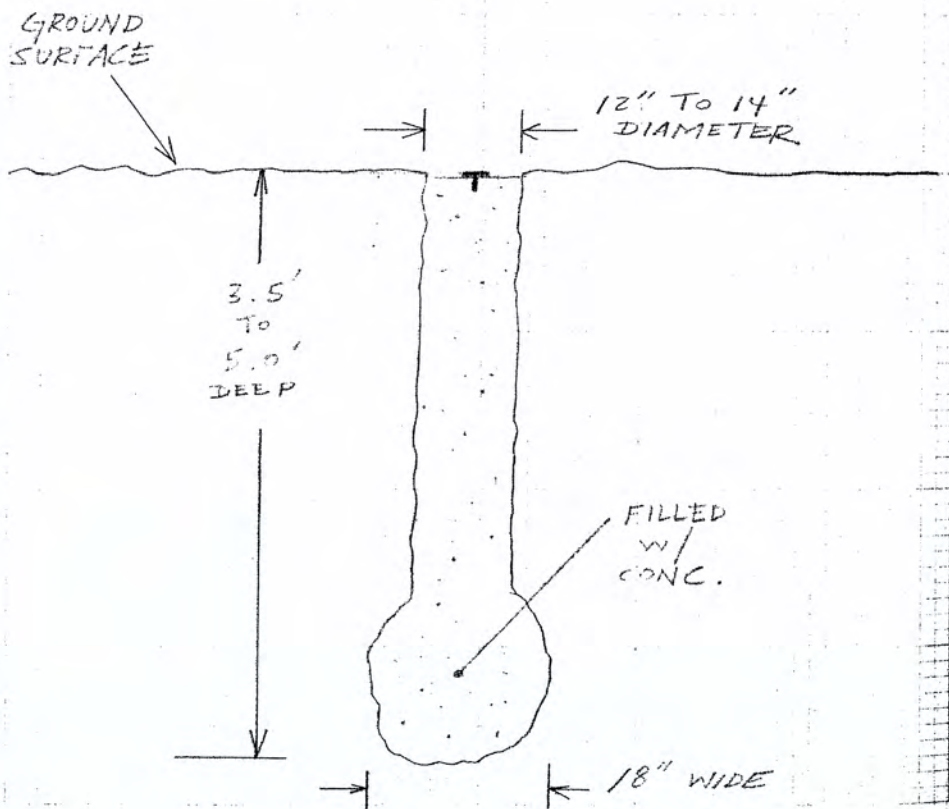


A. REDERO
T. LOPEZ
M. MORA

#100-1011F
S.F. W.M.D.

9/12/05

NOTE: ALL CONCRETE MONUMENTS
WERE SET ACCORDING TO
NGS STANDARDS.





SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 10/10/05

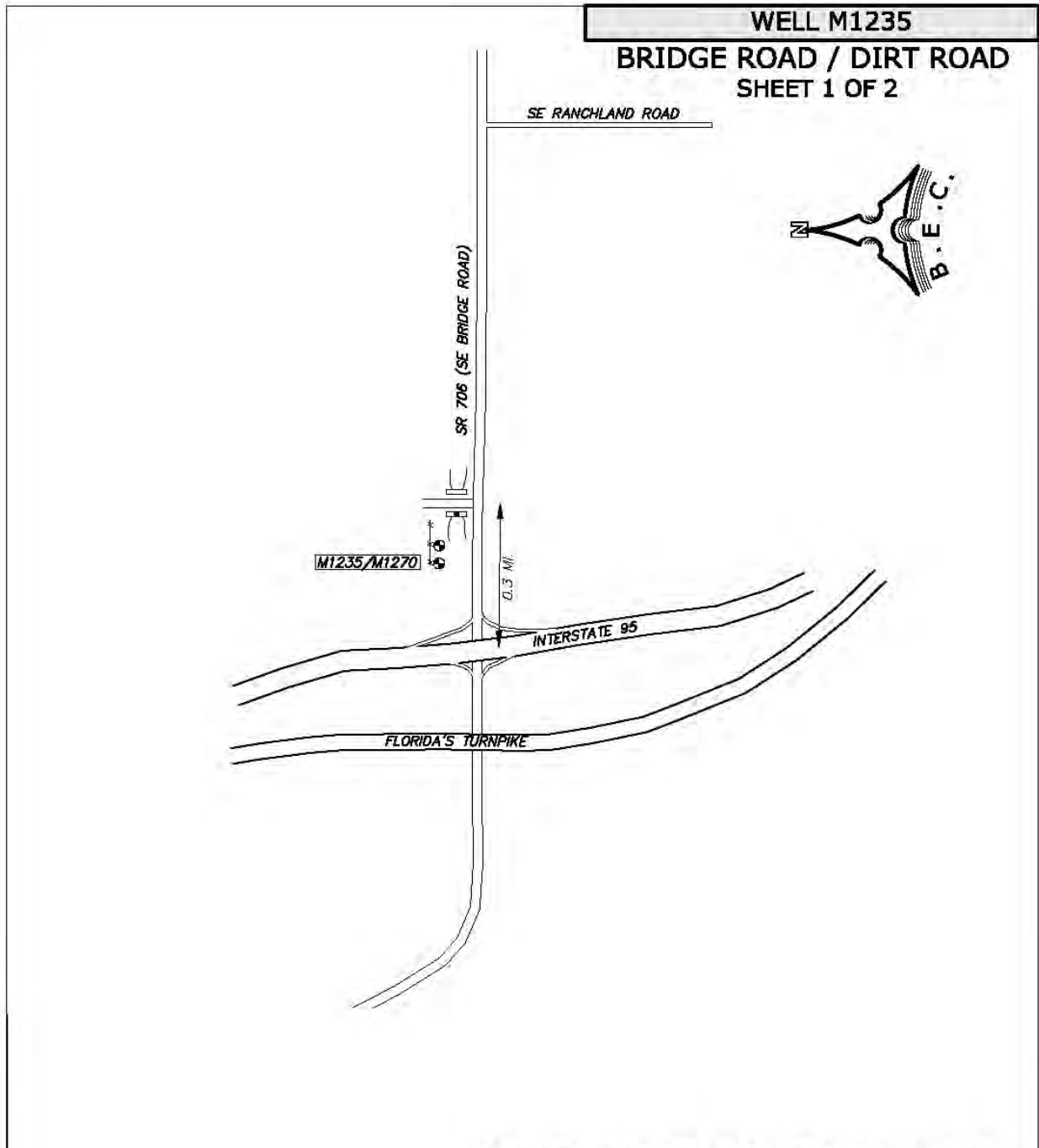
COUNTY	MARTIN	PROJECT	BRIDGE ROAD	DESIGNATION	M1235 2005
SECTION	<u>27</u>	TOWNSHIP	<u>39S</u>	RANGE	<u>41E</u>
GEOGRAPHIC INDEX OF QUAD <u>Florida</u>					
Established by Biscayne Engineering Company, Inc.			NAME OF QUADRANGLE <u>GOMEZ</u>		
SURVEYOR <u>Mike J. Bartholomew</u> DATE <u>09 / 26 / 2005</u>			FIELD BOOK <u>2548</u> PAGE <u>40</u>		
HORIZONTAL DATUM: 1927 <input type="checkbox"/> 1983 <input checked="" type="checkbox"/> Other _____ (circle one) ZONE <u>0901 (EAST)</u>					
VERTICAL DATUM: MSL 1929 <input type="checkbox"/> 1988 <input checked="" type="checkbox"/> Other _____ (circle one)					
CONTROL ACCURACY: HORIZONTAL 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> SUB-METER (circle one) VERTICAL 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/>					
STATE PLANE COORDINATES <u>M1235 (U.S. Survey feet)</u>		X= <u>907041.51</u>		Y= <u>986034.97</u> DISC EL.= <u>16.14'</u> (NAVD-88)	
LATITUDE <u>M1235 27°02'39.409"N</u>			LONGITUDE <u>080°13'45.328"W</u>		
DESCRIPTION					
Benchmark is situated North of S.E. Bridge Road (S.R. 708), and East of I-95, in Section 27, Township 39 South, Range 41 East, Martin County, Florida					
TO REACH the benchmark from the intersection of Interstate 95 and S.E. Bridge Road (S.R. 708), travel East on S.E. Bridge Road for 0.3 miles (more or less) to an entrance (drive) on the left (North). Turn left and travel North to a standard SFWMD disc stamped "M1235 2005" set in the concrete headwall for a ditch on the left (West) side of the drive.					
Origin of NAVD88 elevation for BM "M1235" is a closed bench level circuit through NGS benchmarks AC5345 (I 95 89 A 24 REF MK) and AC5343 (I 95 89 A 24)					

SKETCH: SEE PAGE 2 and 3




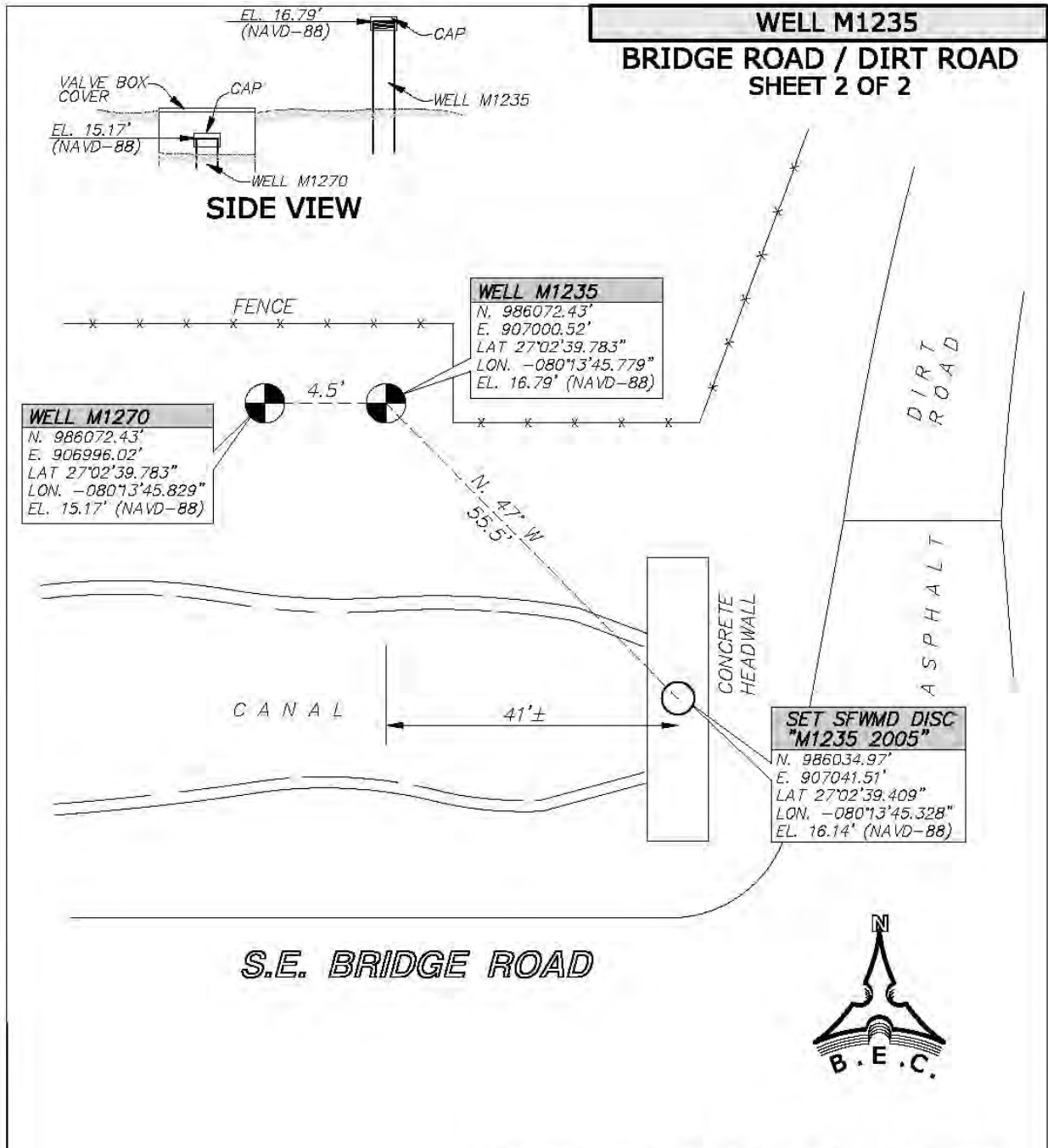
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 10/10/05



MARTIN COUNTY TAPE DOWN WELLS

WELL M1235		<small>(\SURVEY\PROJECTS\772626\772626-CPVMS-MARTIN COUNTY WELLS\mg\Map\SR706\050401.DWG 10/10/2005 3:56:40 PM EDT</small>	
PREPARED FOR:		FIELD BOOK: 2548	DATE: 10/10/05
SOUTH FLORIDA WATER MANAGEMENT DISTRICT		ORDER NO.: 03-77478	PREPARED BY:
		BISCAYNE ENGINEERING COMPANY, INC. Consulting Engineers Planners Surveyors	
		529 WEST FLAGLER STREET, MIAMI, FL. 33130 - TEL (305)324-7671 -- FAX (305)324-0809 LB #0129	



WELL M1235
BRIDGE ROAD / DIRT ROAD
SHEET 2 OF 2

WELL M1270
 N. 986072.43'
 E. 906996.02'
 LAT 27°02'39.783"
 LON. -080°13'45.829"
 EL. 15.17' (NAVD-88)


WELL M1235
 N. 986072.43'
 E. 907000.52'
 LAT 27°02'39.783"
 LON. -080°13'45.779"
 EL. 16.79' (NAVD-88)

SET SFWMD DISC
"M1235 2005"
 N. 986034.97'
 E. 907041.51'
 LAT 27°02'39.409"
 LON. -080°13'45.328"
 EL. 16.14' (NAVD-88)

S.E. BRIDGE ROAD



MARTIN COUNTY TAPE DOWN WELLS

WELL M1235		<small>(\PROJECT\PROJECTS\7706\177476-SFWMD-MARTIN COUNTY WELLS\DWG\M1235\W1235.DWG 10/10/2005 03:54:03 PM EST)</small>	
PREPARED FOR:		FIELD BOOK: 2548	DATE: 10/10/05
SOUTH FLORIDA WATER MANAGEMENT DISTRICT		ORDER NO.: 03-77478	
PREPARED BY: BISCAYNE ENGINEERING COMPANY, INC. Consulting Engineers Planners Surveyors 529 WEST FLAGLER STREET, MIAMI, FL. 33130 - TEL (305)324-7671 - FAX (305)324-0809 LB #0129			

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.27

1 National Geodetic Survey, Retrieval Date = SEPTEMBER 20, 2005

AC5345 *****

AC5345 DESIGNATION - I95 89 A24 RM 2

AC5345 PID - AC5345

AC5345 STATE/COUNTY- FL/MARTIN

AC5345 USGS QUAD - GOMEZ (1983)

AC5345

AC5345 *CURRENT SURVEY CONTROL

AC5345

AC5345* NAD 83(1986)- 27 02 39. (N) 080 14 04. (W) SCALED

AC5345* NAVD 88 - 12.627 (meters) 41.43 (feet) ADJUSTED

AC5345

AC5345 GEOID HEIGHT- -27.21 (meters) GEOID03

AC5345 DYNAMIC HT - 12.608 (meters) 41.36 (feet) COMP

AC5345 MODELED GRAV- 979,101.7 (mgal) NAVD 88

AC5345

AC5345 VERT ORDER - SECOND CLASS II

AC5345

AC5345.The horizontal coordinates were scaled from a topographic map and have
AC5345.an estimated accuracy of +/- 6 seconds.

AC5345

AC5345.The orthometric height was determined by differential leveling
AC5345.and adjusted by the National Geodetic Survey in February 1997.

AC5345

AC5345.The geoid height was determined by GEOID03.

AC5345

AC5345.The dynamic height is computed by dividing the NAVD 88

AC5345.geopotential number by the normal gravity value computed on the
AC5345.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AC5345.degrees latitude (g = 980.6199 gals.).

AC5345

AC5345.The modeled gravity was interpolated from observed gravity values.

AC5345

AC5345; North East Units Estimated Accuracy

AC5345;SPC FL E - 300,530. 275,950. MT (+/- 180 meters Scaled)

AC5345

AC5345 SUPERSEDED SURVEY CONTROL

AC5345

AC5345.No superseded survey control is available for this station.

AC5345

AC5345_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK759915(NAD 83)

AC5345_MARKER: DD = SURVEY DISK

AC5345_SETTING: 30 = SET IN A LIGHT STRUCTURE

AC5345_SP_SET: GUTTER

AC5345_STAMPING: I 95 89 A 24 REF MK 2

AC5345_MARK LOGO: FLDT

AC5345_MAGNETIC: O = OTHER; SEE DESCRIPTION

AC5345_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY

AC5345

AC5345 HISTORY - Date Condition Report By

AC5345 HISTORY - 1989 MONUMENTED FLDT

AC5345

AC5345

STATION DESCRIPTION

AC5345

AC5345'DESCRIBED BY FLORIDA DEPARTMENT OF TRANSPORTATION 1989 (CBM)
AC5345'THE MARK IS LOCATED AT THE INTERSTATE ROUTE 95 AND STATE ROAD 708
AC5345'INTERCHANGE, ABOUT 6 MILES (9.7 KM) WEST OF JUPITER ISLAND, IN THE
AC5345'MEDIAN AT THE NORTH END OF THE BRIDGES, IN THE CONCRETE GUTTER, 9.5
AC5345'FEET (2.9 M) NORTH OF THE NORTHWEST END OF THE SOUTHBOUND BRIDGE, 9.5
AC5345'FEET (2.9 M) WEST OF THE WESTERNMOST WHITE ROAD STRIPE OF THE
AC5345'SOUTHBOUND LANES AND 1.7 FEET (0.5 M) EAST OF THE METAL GUARDRAIL.

*** retrieval complete.

Elapsed Time = 00:00:01

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.27

1 National Geodetic Survey, Retrieval Date = SEPTEMBER 20, 2005

AC5343 *****

AC5343 DESIGNATION - I95 89 A24

AC5343 PID - AC5343

AC5343 STATE/COUNTY- FL/MARTIN

AC5343 USGS QUAD - GOMEZ (1983)

AC5343

AC5343 *CURRENT SURVEY CONTROL

AC5343

AC5343* NAD 83(1986)- 27 02 39. (N) 080 14 04. (W) SCALED

AC5343* NAVD 88 - 12.801 (meters) 42.00 (feet) ADJUSTED

AC5343

AC5343 GEOID HEIGHT- -27.21 (meters) GEOID03

AC5343 DYNAMIC HT - 12.781 (meters) 41.93 (feet) COMP

AC5343 MODELED GRAV- 979,101.7 (mgal) NAVD 88

AC5343

AC5343 VERT ORDER - SECOND CLASS II

AC5343

AC5343.The horizontal coordinates were scaled from a topographic map and have
AC5343.an estimated accuracy of +/- 6 seconds.

AC5343

AC5343.The orthometric height was determined by differential leveling
AC5343.and adjusted by the National Geodetic Survey in February 1997.

AC5343

AC5343.The geoid height was determined by GEOID03.

AC5343

AC5343.The dynamic height is computed by dividing the NAVD 88

AC5343.geopotential number by the normal gravity value computed on the
AC5343.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AC5343.degrees latitude (g = 980.6199 gals.).

AC5343

AC5343.The modeled gravity was interpolated from observed gravity values.

AC5343

AC5343; North East Units Estimated Accuracy

AC5343;SPC FL E - 300,530. 275,950. MT (+/- 180 meters Scaled)

AC5343

AC5343 SUPERSEDED SURVEY CONTROL

AC5343

AC5343.No superseded survey control is available for this station.

AC5343

AC5343_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK759915(NAD 83)

AC5343_MARKER: DD = SURVEY DISK

AC5343_SETTING: 31 = SET IN A PAVEMENT SUCH AS STREET, SIDEWALK, CURB, ETC.

AC5343_SP_SET: DROP INLET

AC5343_STAMPING: I 95 89 A 24

AC5343_MARK LOGO: FLDT

AC5343_MAGNETIC: O = OTHER; SEE DESCRIPTION

AC5343_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY

AC5343

AC5343 HISTORY - Date Condition Report By

AC5343 HISTORY - 1989 MONUMENTED FLDT

AC5343

AC5343

STATION DESCRIPTION

AC5343

AC5343'DESCRIBED BY FLORIDA DEPARTMENT OF TRANSPORTATION 1989 (CBM)
AC5343'THE MARK IS LOCATED AT THE INTERSTATE ROUTE 95 AND STATE ROAD 708
AC5343'INTERCHANGE, ABOUT 6 MILES (9.7 KM) WEST OF JUPITER ISLAND, IN THE
AC5343'MEDIAN AT THE NORTH END OF THE BRIDGES. IT IS SET IN THE TOP OF A
AC5343'ROUND CONCRETE POST 7.0 FEET (2.1 M) NORTHEAST OF THE NORTHEAST END OF
AC5343'THE SOUTHBOUND BRIDGE, 4.7 FEET (1.4 M) EAST OF A METAL WITNESS SIGN
AC5343'ATTACHED TO A GUARDRAIL POST AND 4.6 FEET (1.4 M) NORTH OF THE NORTH
AC5343'CONCRETE GUARDWALL BETWEEN THE NORTH AND SOUTHBOUND BRIDGES.

*** retrieval complete.

Elapsed Time = 00:00:01

From the "ngvd29.txt" file provided by NGS for the CERP Geodetic Vertical Control Project.
 Line/Part: L26232 SSN+: mark floated, SSN*: mark constrained, SSN#: mark floated
 & constrained

Mark ID	SSN	PID	Designation	Geopotential	Elevation	Codes
1649	9028	AJ5611	P 516	5.1680	5.2735	
1653	9032	AC5348	BR 26 A	6.5532	6.6869	

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.27

1 National Geodetic Survey, Retrieval Date = SEPTEMBER 20, 2005

AC5348 *****

AC5348 DESIGNATION - BR 26 A

AC5348 PID - AC5348

AC5348 STATE/COUNTY- FL/MARTIN

AC5348 USGS QUAD - INDIAN TOWN SE (1983)

AC5348

AC5348 *CURRENT SURVEY CONTROL

AC5348

AC5348* NAD 83(1999)- 27 02 51.50041(N) 080 15 10.01890(W) ADJUSTED

AC5348* NAVD 88 - 6.230 (meters) 20.44 (feet) ADJUSTED

AC5348

AC5348 X - 962,389.928 (meters) COMP

AC5348 Y - -5,602,409.896 (meters) COMP

AC5348 Z - 2,882,908.318 (meters) COMP

AC5348 LAPLACE CORR- -2.80 (seconds) DEFLEC99

AC5348 ELLIP HEIGHT- -20.93 (meters) (12/12/02) GPS OBS

AC5348 GEOID HEIGHT- -27.17 (meters) GEOID03

AC5348 DYNAMIC HT - 6.221 (meters) 20.41 (feet) COMP

AC5348 MODELED GRAV- 979,102.0 (mgal) NAVD 88

AC5348

AC5348 HORZ ORDER - FIRST

AC5348 VERT ORDER - FIRST CLASS II

AC5348 ELLP ORDER - FOURTH CLASS I

AC5348

AC5348.The horizontal coordinates were established by GPS observations

AC5348.and adjusted by the National Geodetic Survey in December 2002.

AC5348

AC5348.The orthometric height was determined by differential leveling

AC5348.and adjusted by the National Geodetic Survey in February 1997.

AC5348

AC5348.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AC5348

AC5348.The Laplace correction was computed from DEFLEC99 derived deflections.

AC5348

AC5348.The ellipsoidal height was determined by GPS observations

AC5348.and is referenced to NAD 83.

AC5348

AC5348.The geoid height was determined by GEOID03.

AC5348

AC5348.The dynamic height is computed by dividing the NAVD 88

AC5348.geopotential number by the normal gravity value computed on the

AC5348.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AC5348.degrees latitude (g = 980.6199 gals.).

AC5348

AC5348.The modeled gravity was interpolated from observed gravity values.

AC5348

AC5348; North East Units Scale Factor Converg.

AC5348;SPC FL E - 300,902.146 274,130.541 MT 1.00000899 +0 20 23.3

AC5348;UTM 17 - 2,991,931.461 574,105.248 MT 0.99966779 +0 20 23.3

AC5348

AC5348! - Elev Factor x Scale Factor = Combined Factor

AC5348!SPC FL E - 1.00000329 x 1.00000899 = 1.00001228
 AC5348!UTM 17 - 1.00000329 x 0.99966779 = 0.99967108

AC5348

AC5348 SUPERSEDED SURVEY CONTROL

AC5348

AC5348 NAVD 88 (12/12/02) 6.23 (m) 20.4 (f) LEVELING 3

AC5348

AC5348.Superseded values are not recommended for survey control.

AC5348.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AC5348.[See file dsdata.txt](#) to determine how the superseded data were derived.

AC5348

AC5348_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK7410591931(NAD 83)

AC5348_MARKER: DD = SURVEY DISK

AC5348_SETTING: 37 = SET IN A MASSIVE RETAINING WALL

AC5348_SP_SET: BRIDGE WINGWALL

AC5348_STAMPING: BM BR 26 A 1984

AC5348_MARK LOGO: FL-085

AC5348_MAGNETIC: N = NO MAGNETIC MATERIAL

AC5348_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AC5348_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AC5348+SATELLITE: SATELLITE OBSERVATIONS - May 13, 2002

AC5348

HISTORY	- Date	Condition	Report By
AC5348 HISTORY	- 1984	MONUMENTED	FL-085
AC5348 HISTORY	- 19891231	GOOD	FLDT
AC5348 HISTORY	- 20010718	GOOD	GCYI
AC5348 HISTORY	- 20020513	GOOD	MAPTEC

AC5348

AC5348 STATION DESCRIPTION

AC5348

AC5348'DESCRIBED BY FLORIDA DEPARTMENT OF TRANSPORTATION 1989 (CBM)

AC5348'TO REACH THE MARK FROM THE INTERCHANGE OF INTERSTATE ROUTE 95 AND SR

AC5348'708, ABOUT 6 MILES (9.7 KM) WEST OF JUPITER ISLAND, GO WESTERLY ON

AC5348'STATE ROAD 708 FOR 1.15 MILES (1.85 KM) TO BRIDGE NO H-15 OVER A CANAL

AC5348'AND THE MARK. THE MARK IS A MARTIN COUNTY BRASS DISK, SET IN A DRILL

AC5348'HOLE IN THE TOP OF THE NORTHEAST CONCRETE WINGWALL, 17.0 FEET (5.2 M)

AC5348'EAST OF THE CENTER OF THE ROAD AND 2.5 FEET (0.8 M) NORTH OF THE NORTH

AC5348'END OF THE METAL GUARDRAIL.

AC5348

AC5348 STATION RECOVERY (2001)

AC5348

AC5348'RECOVERY NOTE BY G.C.Y., INCORPORATED 2001 (PA)

AC5348'RECOVERED AS DESCRIBED.

AC5348'

AC5348

AC5348 STATION RECOVERY (2002)

AC5348

AC5348'RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)

AC5348'STATION RECOVERY (2002)

AC5348'RECOVERY NOTE BY MAPTECH, INCORPORATED 2002 (CDP)

AC5348'RECOVERED AS DESCRIBED.

AC5348'

AC5348'

*** retrieval complete.

Elapsed Time = 00:00:00

From the "ngvd29.txt" file provided by NGS for the CERP Geodetic Vertical Control Project.
 Line/Part: L26232 SSN+: mark floated, SSN*: mark constrained, SSN#: mark floated & constrained

Mark ID	SSN	PID	Designation	Geopotential	Elevation	Codes
1649	9028	AJ5611	P 516	5.1680	5.2735	
1653	9032	AC5348	BR 26 A	6.5532	6.6869	

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.27

1 National Geodetic Survey, Retrieval Date = SEPTEMBER 20, 2005

AJ5611 *****

AJ5611 DESIGNATION - P 516

AJ5611 PID - AJ5611

AJ5611 STATE/COUNTY- FL/MARTIN

AJ5611 USGS QUAD - GOMEZ (1983)

AJ5611

AJ5611 *CURRENT SURVEY CONTROL

AJ5611

AJ5611* NAD 83(1999)- 27 02 38.54265(N) 080 12 22.95954(W) ADJUSTED

AJ5611* NAVD 88 - 4.817 (meters) 15.80 (feet) ADJUSTED

AJ5611

AJ5611 X - 966,957.766 (meters) COMP

AJ5611 Y - -5,601,805.945 (meters) COMP

AJ5611 Z - 2,882,552.407 (meters) COMP

AJ5611 LAPLACE CORR- -3.30 (seconds) DEFLEC99

AJ5611 ELLIP HEIGHT- -22.47 (meters) (12/12/02) GPS OBS

AJ5611 GEOID HEIGHT- -27.30 (meters) GEOID03

AJ5611 DYNAMIC HT - 4.809 (meters) 15.78 (feet) COMP

AJ5611 MODELED GRAV- 979,101.1 (mgal) NAVD 88

AJ5611

AJ5611 HORZ ORDER - FIRST

AJ5611 VERT ORDER - FIRST CLASS II

AJ5611 ELLP ORDER - FOURTH CLASS I

AJ5611

AJ5611.The horizontal coordinates were established by GPS observations

AJ5611.and adjusted by the National Geodetic Survey in December 2002.

AJ5611

AJ5611.The orthometric height was determined by differential leveling

AJ5611.and adjusted by the National Geodetic Survey in November 2001.

AJ5611

AJ5611.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AJ5611

AJ5611.The Laplace correction was computed from DEFLEC99 derived deflections.

AJ5611

AJ5611.The ellipsoidal height was determined by GPS observations

AJ5611.and is referenced to NAD 83.

AJ5611

AJ5611.The geoid height was determined by GEOID03.

AJ5611

AJ5611.The dynamic height is computed by dividing the NAVD 88

AJ5611.geopotential number by the normal gravity value computed on the

AJ5611.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AJ5611.degrees latitude (g = 980.6199 gals.).

AJ5611

AJ5611.The modeled gravity was interpolated from observed gravity values.

AJ5611

AJ5611; North East Units Scale Factor Converg.

AJ5611;SPC FL E - 300,531.473 278,737.046 MT 1.00001768 +0 21 39.1

AJ5611;UTM 17 - 2,991,560.914 578,710.181 MT 0.99967648 +0 21 39.1

AJ5611

AJ5611! - Elev Factor x Scale Factor = Combined Factor

AJ5611!SPC FL E - 1.00000353 x 1.00001768 = 1.00002121
 AJ5611!UTM 17 - 1.00000353 x 0.99967648 = 0.99968001

AJ5611

AJ5611 SUPERSEDED SURVEY CONTROL

AJ5611

AJ5611 NAVD 88 (12/12/02) 4.82 (m) 15.8 (f) LEVELING 3

AJ5611

AJ5611.Superseded values are not recommended for survey control.

AJ5611.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AJ5611.[See file dsdata.txt](#) to determine how the superseded data were derived.

AJ5611

AJ5611_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK7871091561(NAD 83)

AJ5611_MARKER: F = FLANGE-ENCASED ROD

AJ5611_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

AJ5611_STAMPING: P 516 2001

AJ5611_MARK LOGO: FL-085

AJ5611_PROJECTION: FLUSH

AJ5611_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET

AJ5611_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AJ5611_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AJ5611+SATELLITE: SATELLITE OBSERVATIONS - May 13, 2002

AJ5611_ROD/PIPE-DEPTH: 21.0 meters

AJ5611

AJ5611 HISTORY	- Date	Condition	Report By
AJ5611 HISTORY	- 20010513	MONUMENTED	GCYI
AJ5611 HISTORY	- 20020513	GOOD	MAPTEC

AJ5611

AJ5611 STATION DESCRIPTION

AJ5611

AJ5611'DESCRIBED BY G.C.Y., INCORPORATED 2001 (KFK)

AJ5611'THE MARK IS LOCATED 7.4 KM (4.6 MI) SOUTHWEST OF HOBE SOUND, 16.7 KM

AJ5611'(J10.4 MI)

AJ5611'NORTHWEST OF JUPITER AND 17.5 KM (10.9 MI) SOUTHEAST OF STUART IN

AJ5611'SECTION

AJ5611'26, TOWNSHIP 39 SOUTH, RANGE 41 EAST NEAR THE NORTH RIGHT-OF-WAY OF

AJ5611'C.R.

AJ5611'708 (BRIDGE ROAD).

AJ5611'

AJ5611'MARTIN COUNTY RIGHT-OF-WAY.

AJ5611'

AJ5611'TO REACH THE MARK FROM THE INTERSECTION OF I-95 AND C.R. 708 (BRIDGE

AJ5611'ROAD)

AJ5611'GO EAST ON C.R. 708 2.7 KM (1.7 MI) TO THE MARK ON THE LEFT.

AJ5611'

AJ5611'THE MARK IS 17 M (56 FT) NORTH OF THE CENTERLINE OF C.R. 708, 1.3 M (4

AJ5611'FT) EAST

AJ5611'OF A POWER LINE, 21 M (69 FT) SOUTH OF A METAL GATE AND 0.8 M (2.7 FT)

AJ5611'WEST OF

AJ5611'THE WEST EDGE OF A CONCRETE DRIVE.

AJ5611' ACCESS IS THROUGH AN ALUMINUM ACCESS CAP.

AJ5611'

AJ5611'NOTE - MAGNET PLACED IN PVC SLEEVE INSIDE ACCESS COVER.

AJ5611'

AJ5611'

AJ5611

AJ5611 STATION RECOVERY (2002)

AJ5611

AJ5611'RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)

AJ5611'STATION RECOVERY (2002)

AJ5611'RECOVERY NOTE BY MAPTECH, INCORPORATED 2002 (CDP)

AJ5611'RECOVERED AS DESCRIBED.

AJ5611'

AJ5611'

*** retrieval complete.

Elapsed Time = 00:00:00

LEVEL RUN

DATE	STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV.	NOTES
								NAVD-88	
08/18/05	NGS BM	4.86							
(FB 2548,	AC5345	4.32	4.32	45.75				41.43	
PG 40...)	195 89 A24 RM 2	3.78							
					16.54				
	TP#1				16.04	16.04	29.72		
					15.53				
		3.01							
	SHAKE	2.85	2.85	32.57					
		2.69							
					14.63				
	TP#2				14.31	14.31	18.26		
					13.99				
		7.36							
	SHAKE	5.97	5.97	24.23					
		4.58							
					7.59				
	TP#3				5.73	5.73	18.50		
					3.87				
		7.07							
	SHAKE	5.48	5.48	23.97					
		3.88							
					7.36				
	TP#4				5.75	5.75	18.22		
					4.14				
		7.30							
	SHAKE	6.41	6.41	24.63					
		5.52							
	BM				8.94				SET SFWMD
	DISC				8.49	8.49	16.14		DISC STAMPED
	M 1235				8.04				M 1235 2005
		4.68							
	SHAKE	4.22	4.22	20.36					
		3.76							
					5.71				
	WELL				5.53	5.53	15.17		WELL
	M 1270				5.36				M 1270

LEVEL RUN

DATE	STA	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV. NAVD-88	NOTES
		5.42							
	SHAKE	5.24	5.24	20.41					
		5.06							
					3.55				
	TP#5				3.03	3.03	17.38		
					2.51				
		7.91							
	SHAKE	7.39	7.39	24.77					
		6.87							
					7.38				
	TP#6				6.55	6.55	18.22		
					5.72				
		7.26							
	SHAKE	5.79	5.79	24.01					
		4.32							
					7.25				
	TP#7				5.51	5.51	18.50		
					3.77				
		6.92							
	SHAKE	5.48	5.48	23.98					
		4.04							
					7.51				
	TP#8				5.71	5.71	18.27		
					3.91				
		13.03							
	SHAKE	12.75	12.75	31.01					
		12.46							
					1.44				
	TP#9				1.29	1.29	29.72		
					1.14				
		18.21							
	SHAKE	17.75	17.75	47.47					
		17.29							
(FB 2548, PG 44...)	NGS BM AC5343				5.71				<i>ERROR</i>
08/15/05	I95 89 A24				5.45	5.45	42.03	42.00	-0.025
					5.19				