

### WELL CUTTINGS PROCESSING FORM

SFWMD ID NO.: 111-38 WELL CONST. PERMIT NO.: \_\_\_\_\_

WELL NAME: SL MW-110 GEOPHY. LOG AVAIL.  Yes  No

COUNTY St. Lucie SFWMD GEOPHY.# \_\_\_\_\_

LOCATION: 1/4 of NW1/4 of SE 1/4 of Sec. 15 Twp. 35 Rge. 40

Latitude 27 25 54 Longitude 80 19 15

Planar X \_\_\_\_\_ Planar Y \_\_\_\_\_

DRILLER: Tony Lubrano DATE DRILLED 5-16-89

DEPTH (ft) 153 ELEVATION (NGVD) 27  TOPO  SURVEY

NO. OF SAMPLES 33 NO. OF SPLITS 2 DATE SENT \_\_\_\_\_

SENT TO:  BOG  USGS \_\_\_\_\_  OTHER \_\_\_\_\_

WATER SAMPLE: CHLORIDES (mg/l) \_\_\_\_\_  
LAB SAMPLE # \_\_\_\_\_

HYDRAULIC DATA AVAILABLE:  
SPECIFIC CAPACITY  Yes  No  
PUMP TEST  Yes  No

COMPLETION INFO:  PLUGGED  TEST  MONITOR  PRODUCTION

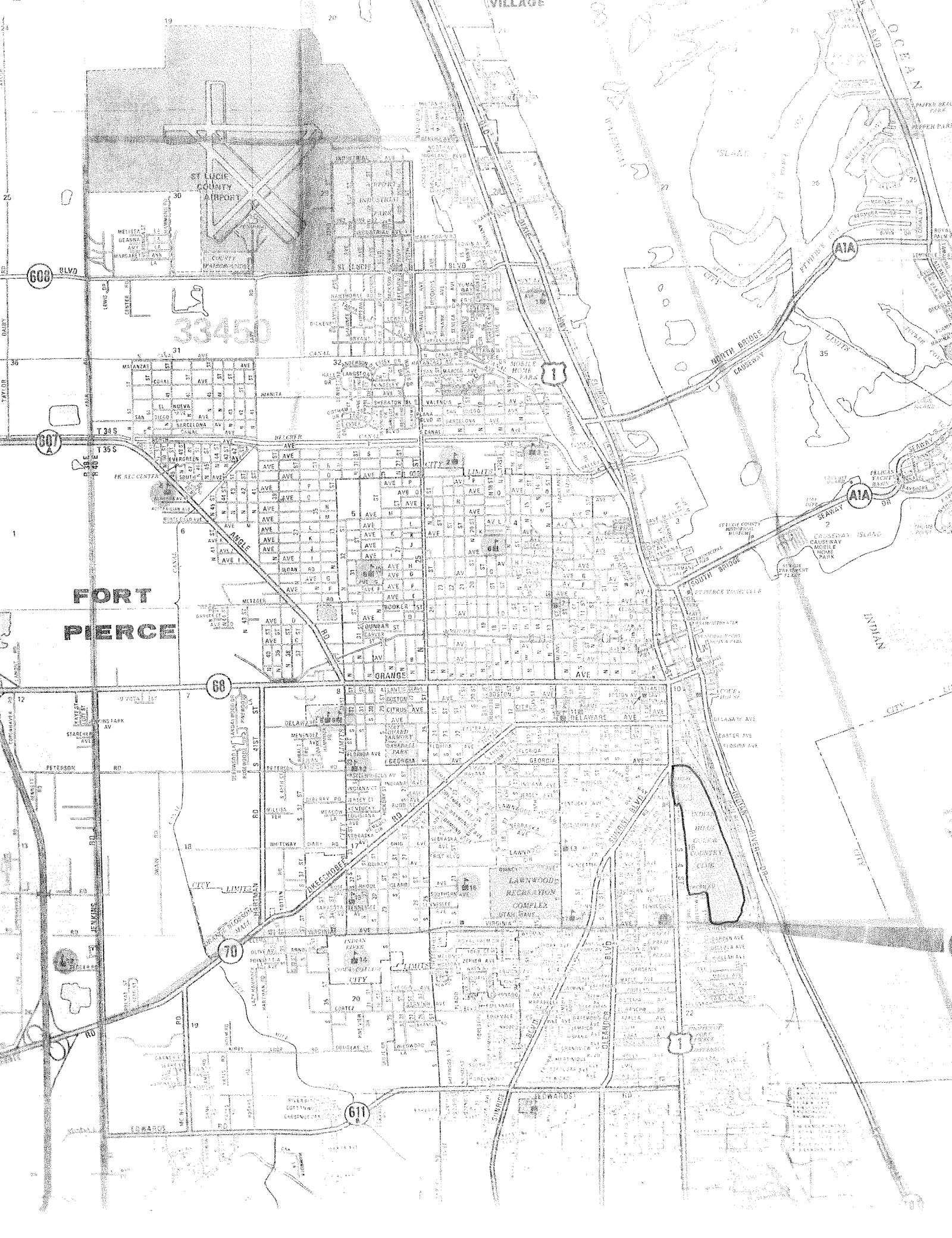
DRILLING METHOD:  CABLE TOOL  JET  AUGER  
 ROTARY:  Mud  Air  Reverse  Dual Wall

CASING: TYPE:  PVC  GALV.  STEEL  
DIAMETER: 2 INTERVAL: 0-80 ; 100-153

SCREEN: TYPE:  PVC  GALV.  STEEL  
DIAMETER: \_\_\_\_\_ INTERVAL: 80-100 ft ; slot size = 0.0214

GEOLOGIST DESCRIPTION:  NO  YES \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



ST LUCIE COUNTY AIRPORT

33450

**FORT PIERCE**

68

70

611

CITY LINE

LAWYER WOOD RECREATION COMPLEX

A1A

A1A

1

INDIAN CITY

INDIAN CITY

INDIAN CITY

INDIAN CITY

INDIAN CITY

INDIAN CITY

INDIAN CITY

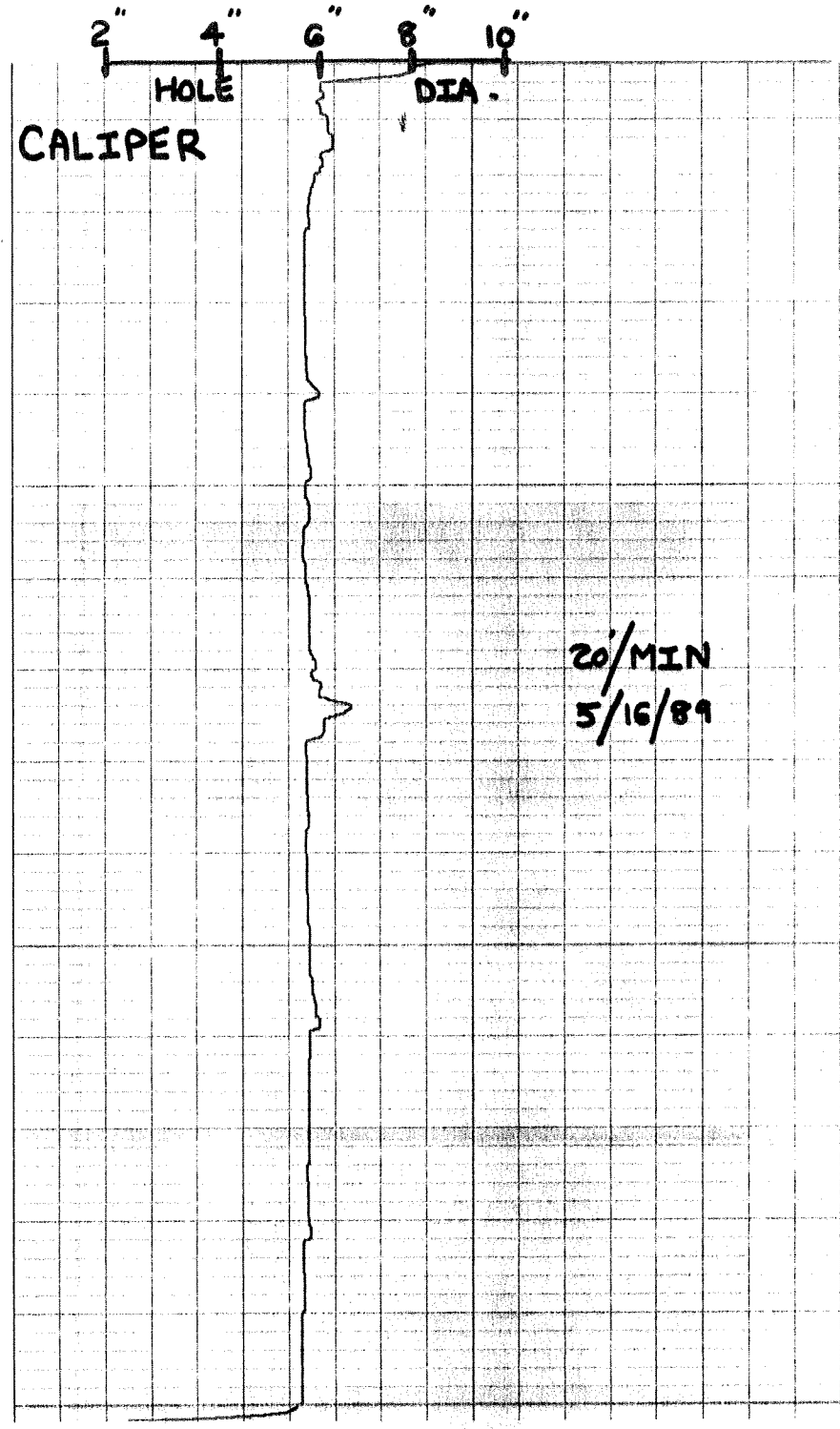
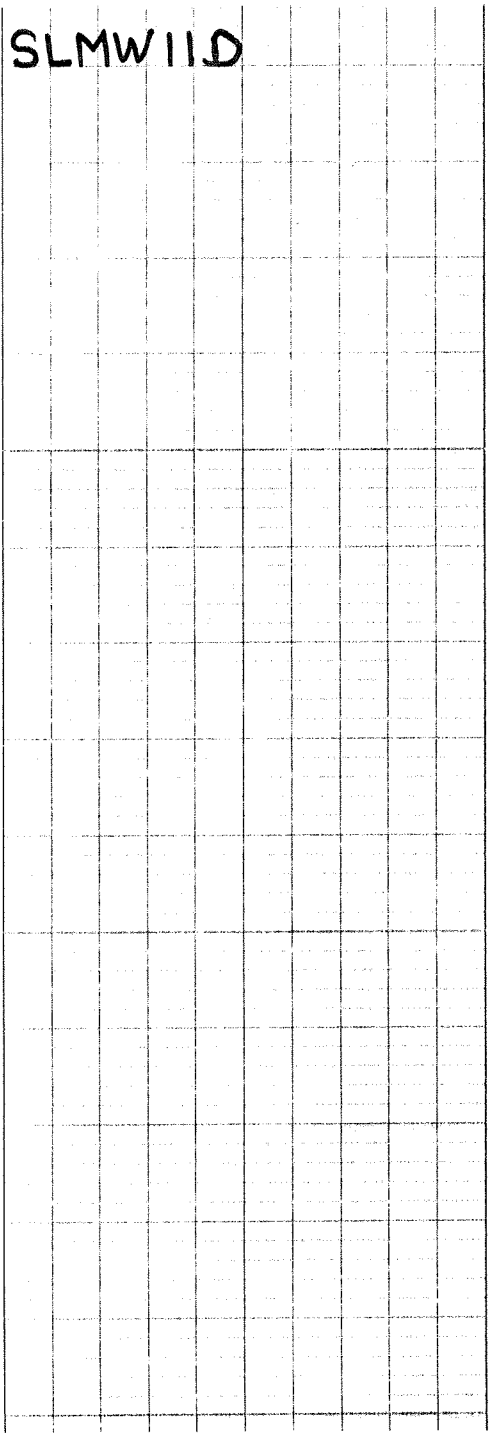
INDIAN CITY

INDIAN CITY

TIME DRIVE SCALE = TEN INCHES PER MINUTE

CHANNEL 1 CONFIGURATION:  
SPAN = 410  
OFFSET = 1938  
DOT CODE = SOLID  
DEPTH OFFSET = .0  
BACKUP = OFF

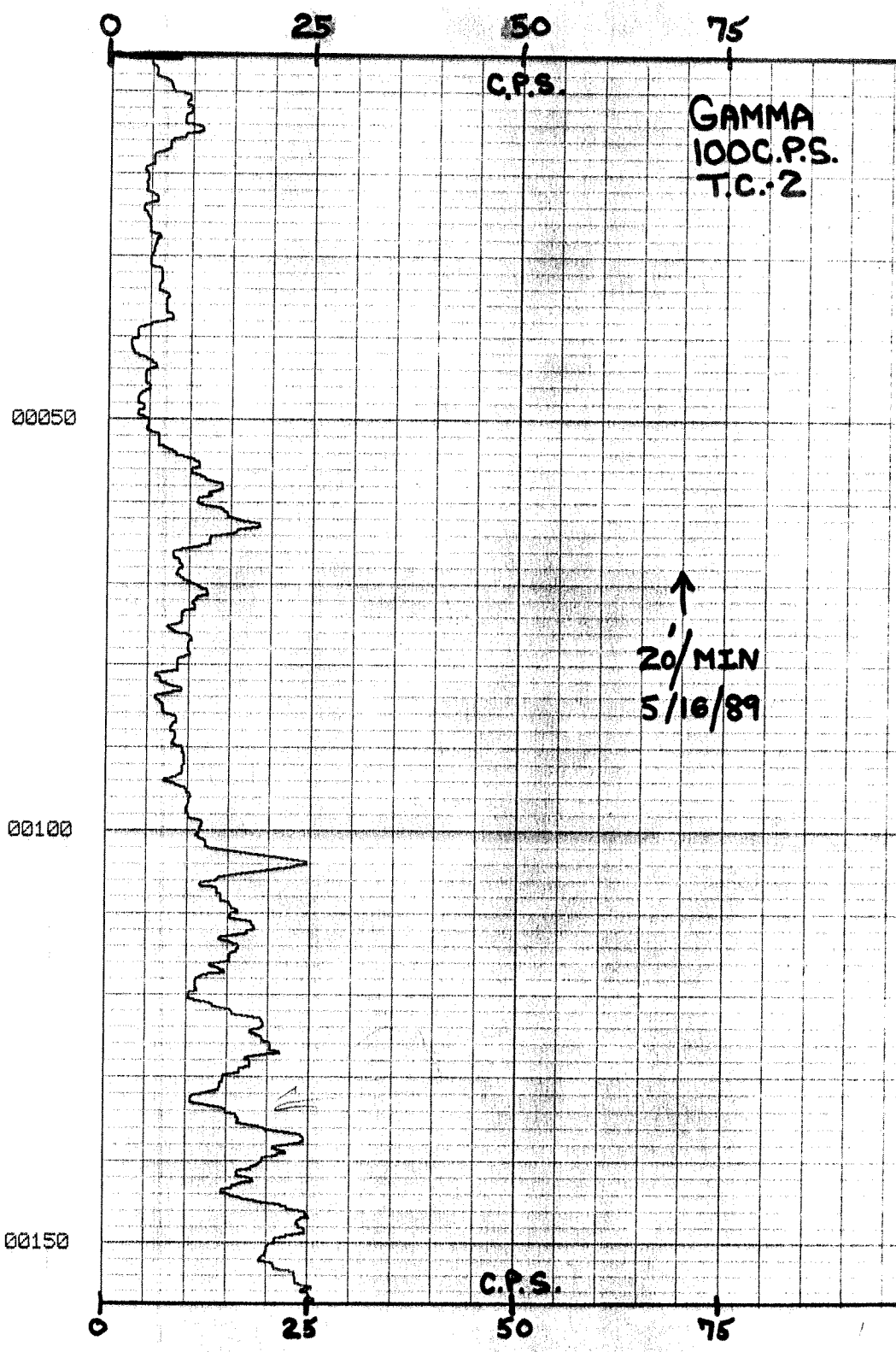
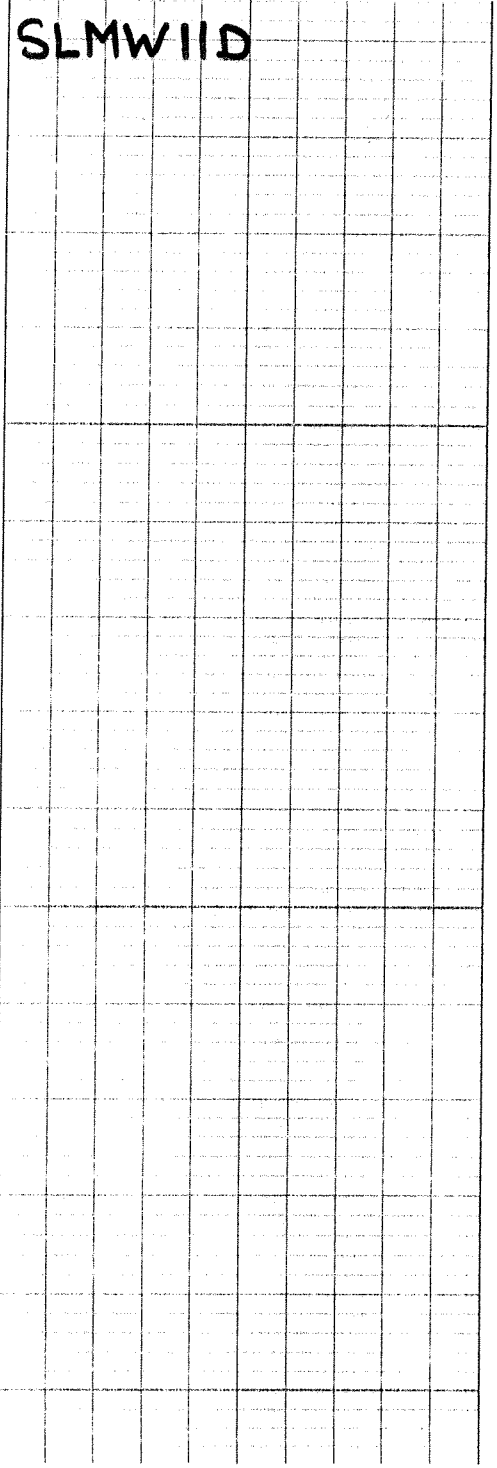
SLMWIID



SYSTEM CONFIGURATION:  
DEPTH SCALE = FIVE INCH SCALE  
CHART SCALE = A.P.I. LINEAR  
TIME DRIVE SCALE = TEN INCHES PER MINUTE

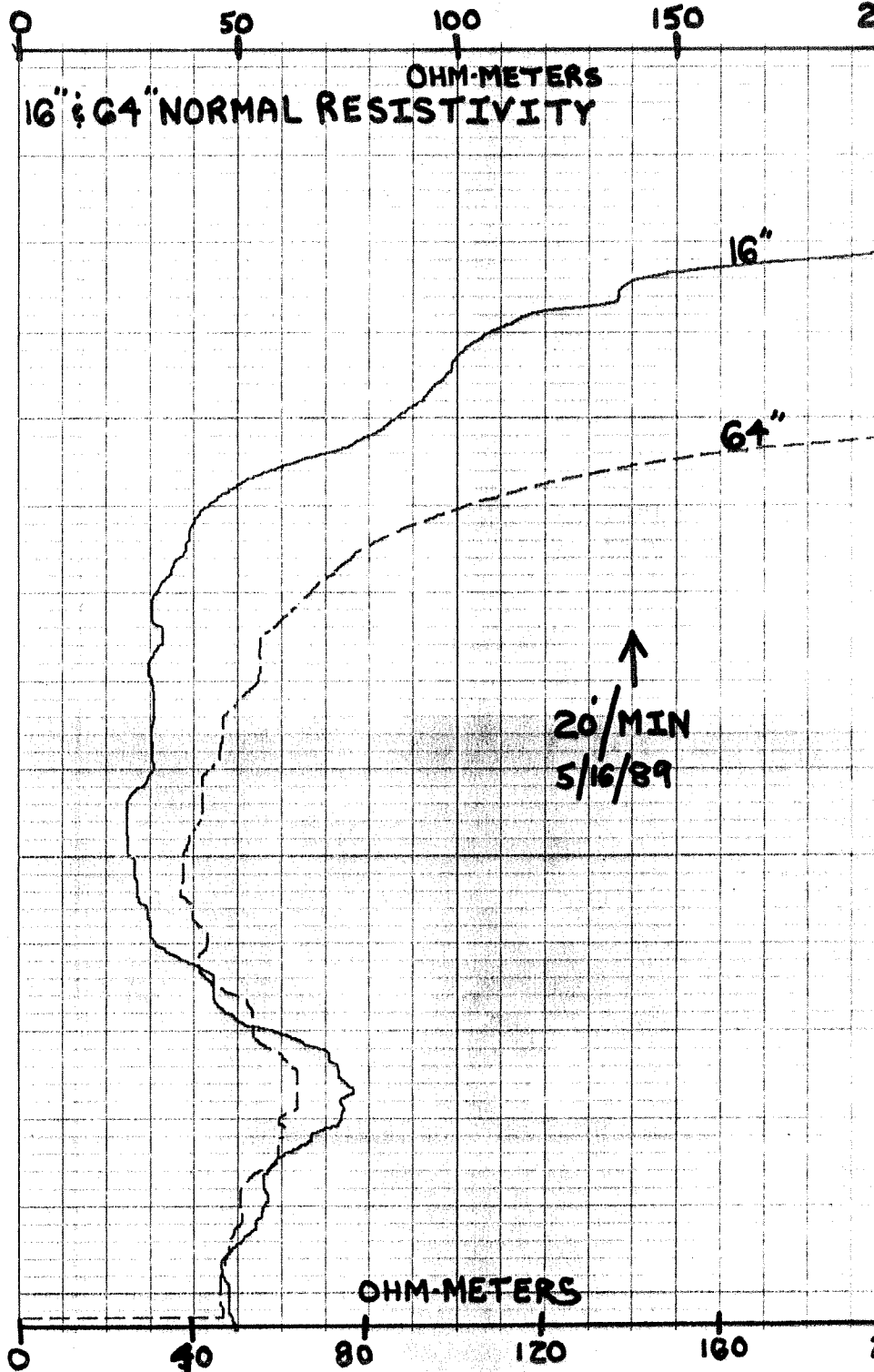
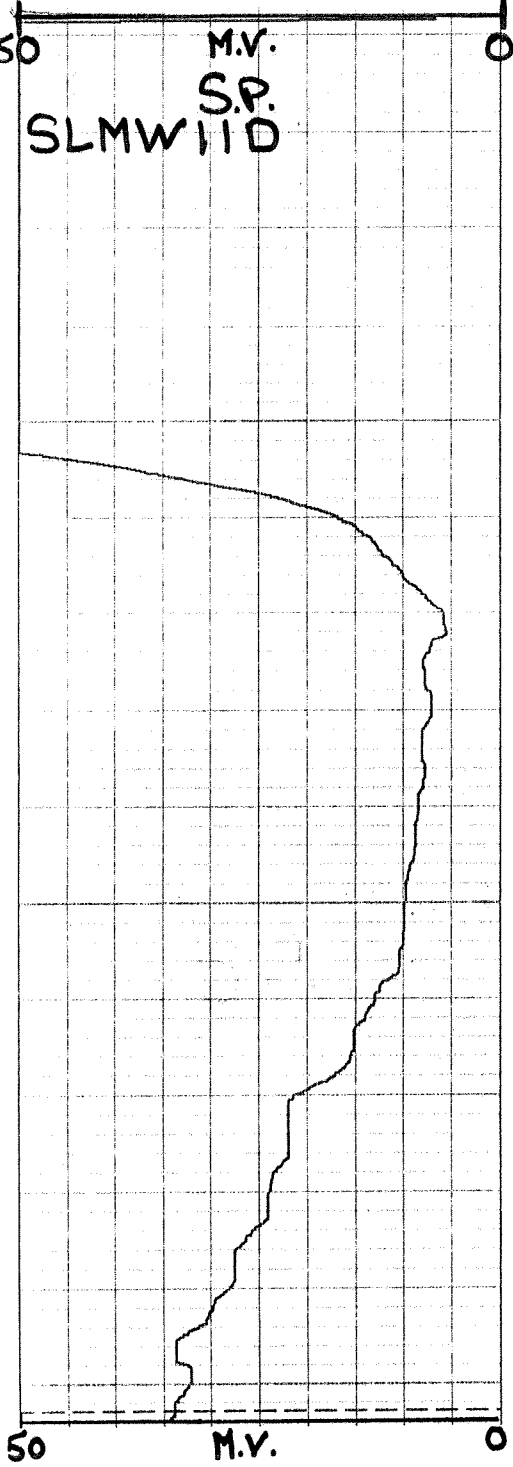
TIME DRIVE SCALE = TEN INCHES PER MINUTE

CHANNEL 1 CONFIGURATION:  
SPAN = 189  
OFFSET = 2358  
DOT CODE = SOLID  
DEPTH OFFSET = .0  
BACKUP = OFF



SYSTEM CONFIGURATION:  
DEPTH SCALE = FIVE INCH SCALE  
CHART SCALE = A.P.I. LINEAR

CHANNEL 3 CONFIGURATION:  
 SPAN = 1040  
 OFFSET = 20  
 DOT CODE = SOLID  
 DEPTH OFFSET = 1.0  
 BACKUP = OFF



SYSTEM CONFIGURATION:  
 DEPTH SCALE = FIVE INCH SCALE  
 CHART SCALE = A.P.I. LINEAR  
 TIME DRIVE SCALE = TEN INCHES PER MINUTE

RIGHT OF ENTRY AGREEMENT/WELL CONSTRUCTION

The SOUTH FLORIDA WATER MANAGEMENT DISTRICT and/or U.S. Geological Survey and the agents, employees or assigns of each, (Permittees) are hereby granted the right to enter upon property owned by Indian Hills Golf and Country Club (owner), and described herein, for the following purposes:

1. To construct water well(s) for the purpose of gathering lithologic data.
2. To conduct aquifer performance and step drawdown test(s) to determine water availability.
3. To collect geophysical logs on selected well(s). \* SEE ATTACHMENT "A".
4. To periodically be allowed access to the well(s) for the purpose of monitoring water levels and/or water quality sampling.

Such equipment as may be needed to accomplish the above purposes may be brought upon, over and across the property, which is described as follows: Between Fairway #9 and #18 at Indian Hills Golf and Country Club, Ft. Pierce Florida.

The permittees, and each of them, warrant to the undersigned that upon completion of the above purposes, the property will be left in, or restored to, the same condition as it was when the permittees or their contractor(s) first entered upon the land to begin their work.

The permittees, and each of them, separately and severally, to the extent permitted by law, shall save and hold harmless the undersigned owner from claims for damages or injury caused by the permittees, their agents, servants, employees, or contractors, during the time this permit for access and use is in effect.

X Clifford Parkin  
OWNER  
President - Board of Governors  
Executed by owner in presence of:

Date: Mar 28, 1989

X Ron Ross

COUNTERSIGNED BY PERMITTEE(S)

A. P. Hostel 4/13/89  
for SFWMD

Date: April 13, 1989

for

Date: \_\_\_\_\_

**WELL COMPLETION REPORT**

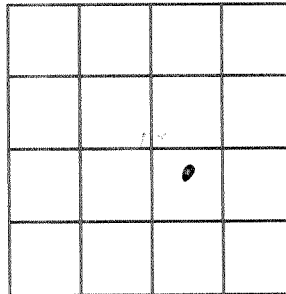
FORM 0124 Rev. 4/85

WELL PERMIT NO. \_\_\_\_\_

INDIAN HILLS  
GOLF & Country Club 1600 S. 3 Street Ft. Pierce F-1  
 Owner \_\_\_\_\_ Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
2334 5-16-89 153 153 54112117  
 Contractor's Name \_\_\_\_\_ License No. \_\_\_\_\_ Completion Date \_\_\_\_\_ Casing Depth \_\_\_\_\_ Total Depth \_\_\_\_\_ Well # \_\_\_\_\_  
Tony Lubiano \_\_\_\_\_  
 Driller's Name \_\_\_\_\_ Registration No. \_\_\_\_\_

TYPE OF WORK: Construct (  ) Repair (  ) Abandon (  )  
 WELL USE: Domestic Well (  ) Public (  ) Monitor (  ) Test (  )  
 Irrigation (  ) Fire Well (  ) Other \_\_\_\_\_  
 METHOD: Rotary with MUD (  ) or Air (  ), Cable Tool (  ), Jet (  )  
 Casing Driven (  ), Other \_\_\_\_\_  
 STATIC WATER LEVEL \_\_\_\_\_ Ft. below top of casing  
 PUMPING WATER LEVEL \_\_\_\_\_ Ft. after \_\_\_\_\_ Hrs. at \_\_\_\_\_ GPM  
 PUMP SIZE \_\_\_\_\_ H.P. CAPACITY \_\_\_\_\_ GPM  
 PUMP TYPE \_\_\_\_\_ INTAKE DEPTH \_\_\_\_\_  
From top of ground

LOCATION  
 Located Near Between  
highways 9 & 18  
 County St. Lucie  
 NW SE 15 35 40  
¼ ¼ Section Township Range  
27 25 54 801915  
Latitude-Longitude



Cuttings sent to District? (  ) Yes  
 (  ) No

LOCATE IN SECTION

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
		From	To	
	2 80	0	80	CASING
	2 100	80	100	SCREEN
	2 153	100	153	CASING
Number of bags				

Casing: Black Steel (  ) Galv. (  ) PVC (  ) Fiberglass (  )  
 Screen: Type PVC Slot size 0.02"  
 Screened from 80 (ft.) to 100 (ft.)  
 Type of grout with % additives \_\_\_\_\_  
 Water: Clear (  ) Colored (  ) Sulphur (  ) Salty (  ) Iron (  )  
 Conductivity \_\_\_\_\_ Chlorides \_\_\_\_\_ mg/l

# WELL COMPLETION REPORT

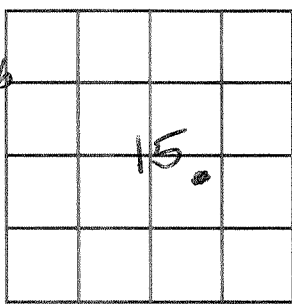
FORM 0124  
Rev. 4/85

WELL PERMIT NO. \_\_\_\_\_

Owner: SFWM D Address: P.O. Box 24680 City: West Palm Beach State: FL Zip: 33416  
~~Contractor's Name~~ License No. Completion Date Casing Depth: 28.5' Total Depth: 36.5' Well #: P6-1  
 Driller's Name Registration No.

TYPE OF WORK: Construct ( )  Repair ( ) Abandon ( )  
 WELL USE: Domestic Well ( ) Public ( ) Monitor  Test ( )  
 Irrigation ( ) Fire Well ( ) Other \_\_\_\_\_  
 METHOD: Rotary with MUD  or Air ( ) Cable Tool ( ) Jet ( )  
 Casing Driven ( ) Other \_\_\_\_\_  
 STATIC WATER LEVEL \_\_\_\_\_ Ft. below top of casing  
 PUMPING WATER LEVEL \_\_\_\_\_ Ft. after \_\_\_\_\_ Hrs. at \_\_\_\_\_ GPM  
 PUMP SIZE \_\_\_\_\_ H.P. CAPACITY \_\_\_\_\_ GPM  
 PUMP TYPE \_\_\_\_\_ INTAKE DEPTH \_\_\_\_\_  
From top of ground

**LOCATION**  
 Located Near E. Side  
Indian Hills Golf + Country Club  
 County St Lucie  
 NW SE 15 35 40  
1/4 1/4 Section Township Range  
 27° 25' 54" 80° 19' 15"  
Latitude-Longitude



Cuttings sent to District? ( ) Yes  No  
**Note: PWS Wells attach a site map if well location is different from site location on permit application.**

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
	0'			
	2" Dia PVC Csg			
	28.5'			
	2" Dia PVC Scr			
	36.5'			
Number of bags				

Casing: Black Steel ( ) Galv.  PVC ( ) Fiberglass ( )  
 Screen: Type PVC Slot size .020"  
 Screened from 28.5" (ft.) to 36.5" (ft.)  
 Type of grout with % additives \_\_\_\_\_  
 Water: Clear ( ) Colored ( ) Sulphur ( ) Salty ( ) Iron ( )  
 Conductivity \_\_\_\_\_ Chlorides \_\_\_\_\_ mg/l



PROJECT Indian Hills Golf Course WELL NO. SLM W11D DATE 5-16-85

TIME	DESCRIPTION - ROCK TYPE, COLOR, HARDNESS, OTHER
0-4	SAND - NO SAMPLE CAUGHT
4-5	Brown SAND
5-22	SAND; very little caught in strainer K.D.
22-30	White and brown SAND; no sample caught
30-34	mostly SAND with some CLAY; majority of CLAY in upper 6 FT K.D.
	Mixed mud
42-50	SAND; some caught in strainer
50-57	DAKER SAND with some CLAY; Loss circulation
57-59	CLAY with some SAND
59-60	CLAY with shell
60-62	shell; some SAND and CLAY Loss circulation K.D.
62-64	SAND, shell with a little CLAY and L.S. Loss circulation
64-69	AS ABOVE; shells dominant
69-71	shell and CLAY 50% each
71-73	shell; little CLAY
73-75	L.S., shell, and CLAY; some SAND
75-82	shell with some L.S. K.P.; MIX MUD
82-85	shell, SAND, some L.S.; most SAND passed strainer and went to SANDER
85-94	AS ABOVE; SAND content increase with depth
94-95	more SAND and CLAY; mostly shell
95-97	shell with SAND and CLAY
97-102	AS ABOVE shell content increases K.D.; Mixed MUD



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

INDIAN HILLS  
PROJECT GOLF COURSE WELL NO. SLMW110 DATE 5-16-89

Shallow well 35 ft min. - 3 ft = 32 ft, 10 inch deep

DEPTH	DESCRIPTION - ROCK TYPE, COLOR, HARDNESS, OTHER
0-4	SAND - NO SAMPLE
4-5	SAND (BROWN TRASH STACK)
5-20	<del>NO</del> SAND VERY LITTLE CAUGHT IN STRAINER
20-22	AS ABOVE
	KD
22-25	SAND WHITE AND BROWN No sample
25-27	AS ABOVE
27-30	AS ABOVE
30-42	SAND WITH CLAY; MOSTLY SAND SMALL SAMPLE. CLAY IN UPPER 6 FT
	KD
	MIXED MUD
42-46	SAND SMALL SAMPLE
46-50	AS ABOVE
50-55	SAND DORTER SOME CLAY
<del>55-57</del>	LOSS CIRCULATION
55-57	AS ABOVE
57-59	CLAY WITH SOME SAND
59-60	CLAY WITH SHELL
60-62	SHELL; LITTLE CLAY SOME SAND LOSS CIRCULATION
	KD
62-64	SAND & SHELL; little clay; some L/S LOSS CIRCULATION, MOSTLY SHELL
64-65	AS ABOVE MOSTLY SHELL
65-71	SHELL & CLAY SOME EACH
71-73	SHELL - some CLAY
73-74	L.S. SHELL, AND CLAY; some SAND
74-75	AS ABOVE
75-76	Shell with some L.S.
76-78	AS ABOVE
78-82	AS ABOVE

SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
INDIAN HILLS  
PROJECT GOLF COURSE WELL NO. SLM 110 DATE 5-16-89

DEPTH	DESCRIPTION - ROCK TYPE, COLOR, HARDNESS, OTHER
	KD
	I GOT A SAMPLE OF LARGE SHELLS FROM 70-82 FT. THESE WERE <del>IN</del> IN VENT TO MUD PIT.
82-83	MIXED MUD
83-85	SHELL SAND, SOME L.S SAND IN SAND. MOSTLY SHELL
85-88	AS ABOVE, MORE SAND
88-90	AS ABOVE, SAND SEEMS TO INCREASE WITH DEPTH. 82-90 FT. BY LOOKING AT BAND IN VENT
90-94	AS ABOVE
94-95	MORE SAND AND CLAY, MOSTLY SHELL
95-97	SHELL WITH SAND AND CLAY
97-99	SHELL CONTENT INCREASES
99-102	AS ABOVE
	KD
	MIX MUD
102-103	SHELL & L.S, SOME SAND
103-104	AS ABOVE
104-105	SHELL MORE SAND & CLAY, CLAY IS
105-108	AS ABOVE
108-110	AS ABOVE
110-113	AS ABOVE
113-116	AS ABOVE, MOST OF SAMPLE PASSED THROUGH STRAINER FROM 113-116
116-119	AS ABOVE, MORE OF SAMPLE CAUGHT
119-122	AS ABOVE
	KD

