

Executive Summary  
ROMP Site No. 11  
Core and Monitor Well

Location - ROMP Site No. 11 is located on the west side of the access road to Shell Creek Reservoir approximately 370 feet north of State Route 764 and 1.5 miles east of the intersection of State Route 764 and U.S. 17 in Charlotte County. The site is in Section 20, Township 40 South, Range 24 East and at latitude  $26^{\circ}58'37''$ , longitude  $81^{\circ}56'11''$ .

Site Easement - The site was obtained from the City of Punta Gorda on May 8, 1974 for the sum of one dollar. The Perpetual Easement is 20 feet by 20 feet and is recorded in O.R. Book 467, Pages 544 through 546 at the Charlotte County Courthouse. A Temporary Construction Easement was not obtained for this site.

Reason for Coring - This well was cored in order to obtain a continuous and accurate lithologic log of the rock materials at this site.

Geology - The site is located on the Pamlico terrace at an elevation of  $\pm 10$  feet above mean sea level (MSL). All geologic information was obtained from core samples that were obtained from land surface to 334.5 feet below land surface datum (LSD). The general geology of this site is as follows:

0-	Sand
- 180'	Tamiami formation
180'-334.5'	Hawthorn formation

Hydrogeology - Due to a lack of hydrologic information in the files, it is hard to draw very many conclusions about the hydrogeology of this site. It appears from the lithologic log that any aquifer above the Tamiami - Hawthorn would be an extremely poor water zone due to the large amounts of clay and clayey sand. The first area that shows any promise would be

at ± 215 feet below LSD in the Hawthorn Formation. An indication that an artesian aquifer exists in this zone is verified from the Inspector's report which states that the well started to flow at ± 220 feet below LSD.

Core Drilling - This site was cored by the Girdles Foundation Company during September, 1974. Core samples of 2 3/4 inches were obtained at this site with a 4 inch phosphate barrel. These samples were examined on site and then sent to the USGS in Sarasota for further interpretation. Upon completion of the core drilling it was decided to construct a monitor well out of the core hole.

Well Construction - The well was constructed by the Girdles Foundation Company during September, 1974 at a cost of approximately \$3,760 or \$11.24 per foot. The well was constructed by using 220 feet of 4 inch PVC casing and filling the grouting of the casing, and the well was drilled out to 334.5 feet by core barrel.

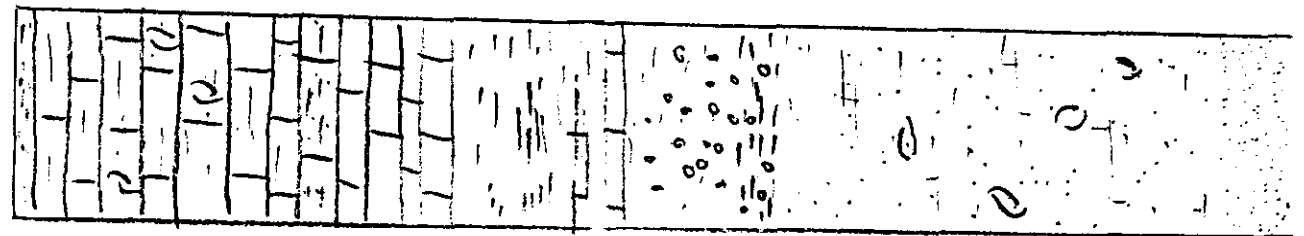
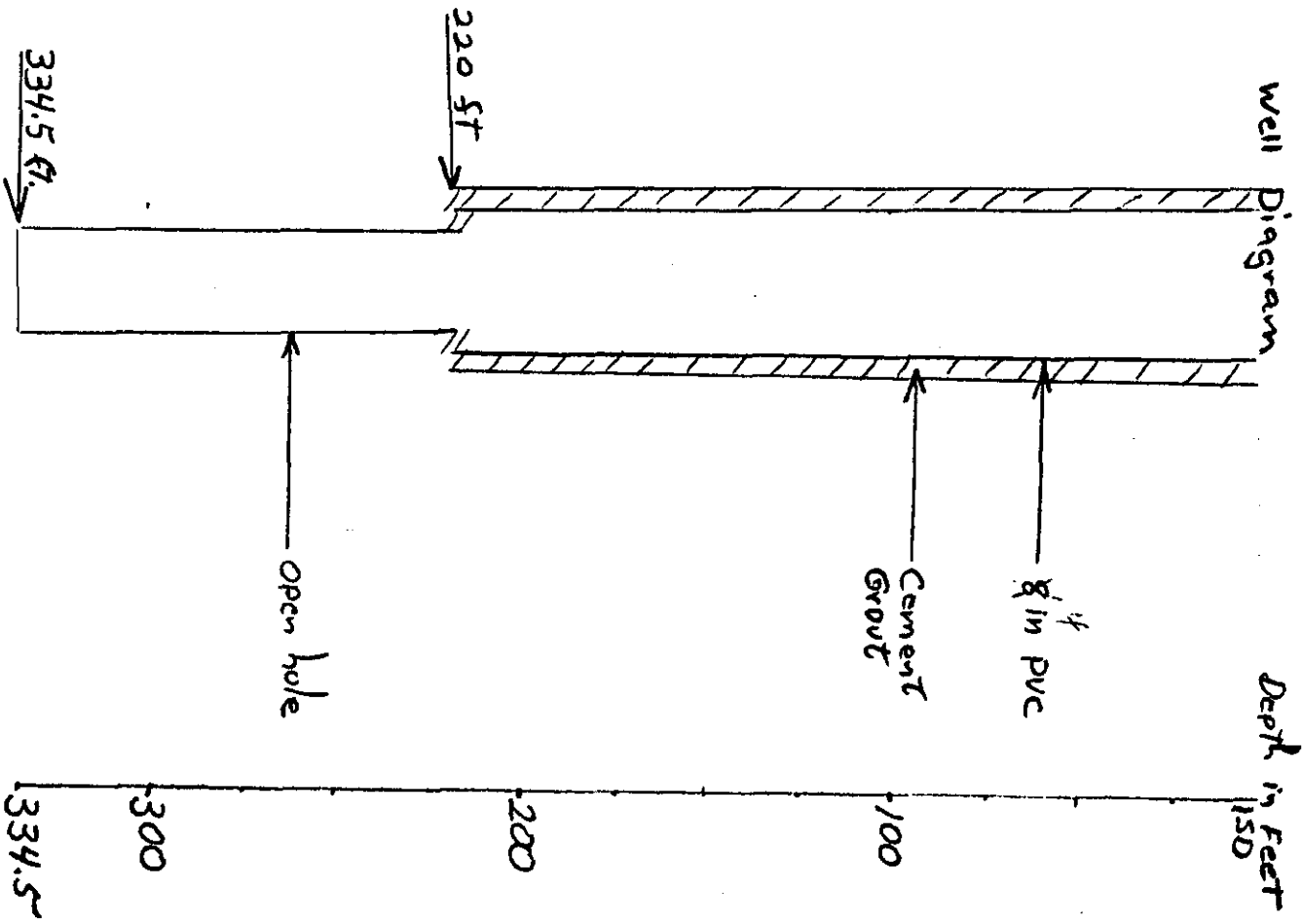
Geophysical Logs - Caliper, gamma, fluid resistivity, and temperature logs were run of the core hole.

Type of Monitor - This well is used as a potentiometric monitor to record the changes in the artesian aquifer in the Hawthorn formation.

Water Quality - Water samples were not obtained.

U.S.G.S. Notification - The U.S.G.S. was notified that this well was complete and ready for monitoring in February, 1976.

NO. 11 Shell Creek



quartz sand (?)

grayish green sandy clay with shell fragments and minor limestone lenses.

#3(4/8)

Blue green sandy clay with phosphat pebbles

limestone and indurated clay

Blue, hard, sandy clay.

Blue plastic clay

hard and soft laminated clay.

fossiliferous limestone.

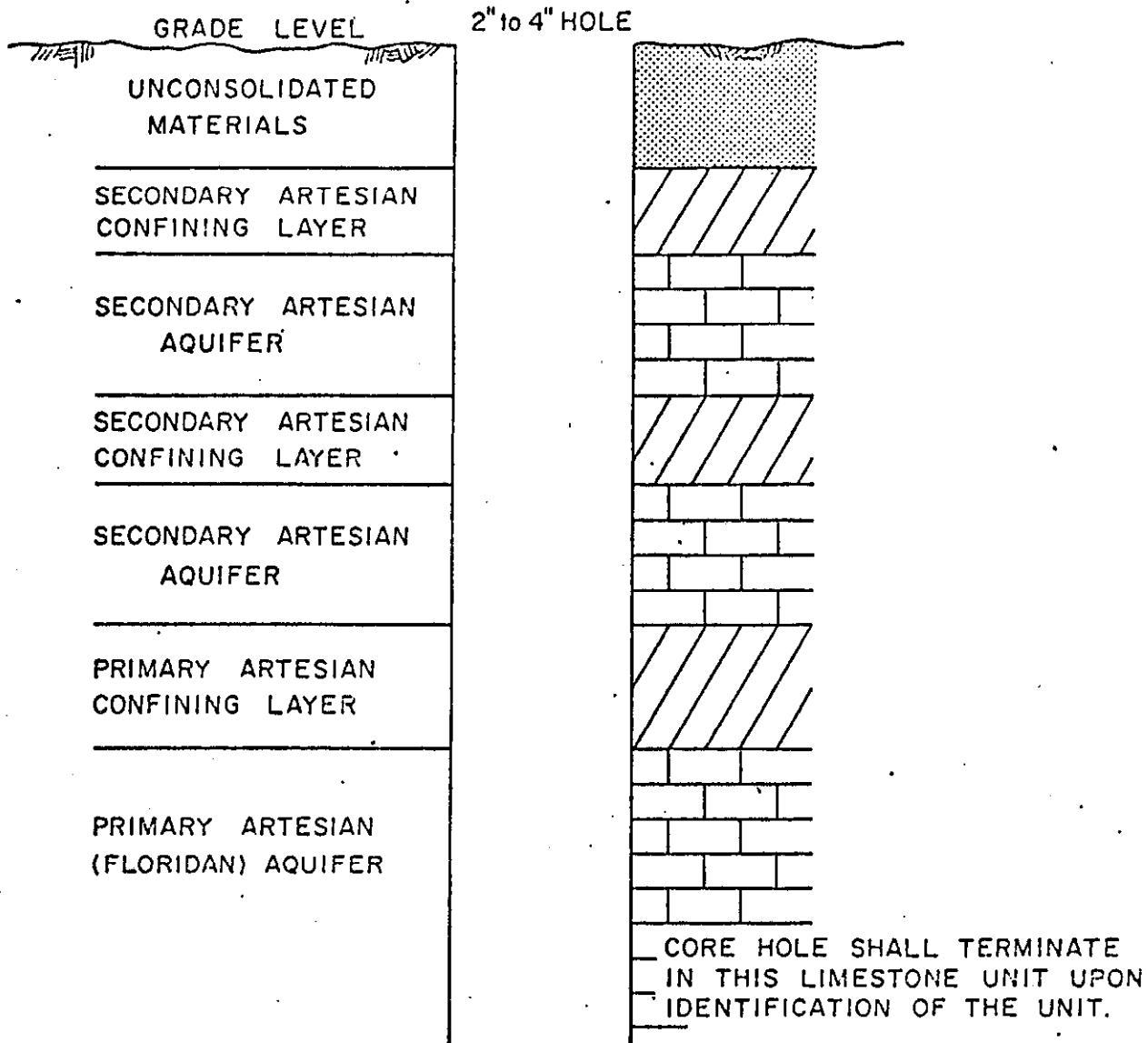
clayey, sandy limestone

fossiliferous, clayey, weathered limestone.

limestone.

stiff blue plastic clay.

5C



CORE HOLE SHALL TERMINATE  
 IN THIS LIMESTONE UNIT UPON  
 IDENTIFICATION OF THE UNIT.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

SPECIFICATION DRAWING  
 CORE BORING

#5(7/7)

DRAWN R.B.O.	CHECKED	APPROVED <i>U. B. M.</i>
DATE 2 / 27 / 74	SCALE N.T.S.	PAGE TS 1-5

## LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W-50013  
 TOTAL DEPTH: 334.5 FT.  
 SAMPLES - NONE

COUNTY - CHARLOTTE  
 LOCATION: T.40S R.24E S.20  
 LAT = 26D 58M 37S  
 LON = 81D 56M 11S

COMPLETION DATE: /09/74  
 OTHER TYPES OF LOGS AVAILABLE - NONE

ELEVATION: 10 FT

OWNER/DRILLER:SWFWMD; ROMP SITE # 11;

WORKED BY:RICKLES; CODED AND ENTERED BY RICHARD GREEN 12\90 FROM LOG  
 PROVIDED BY SWFWMD. CUTTINGS.

0.	-	.	090UDSC	UNDIFFERENTIATED SAND AND CLAY
.	-	180.	122TMIM	TAMIAMI FM.
180.	-	.	122HTRN	HAWTHORN GROUP
0	-	20	SAND; MODERATE GRAY	
			GRAIN SIZE: FINE	
20	-	22	CLAY; MODERATE GRAY	
			ACCESSORY MINERALS: QUARTZ SAND-%	
22	-	30	AS ABOVE	
30	-	32	CLAY; GRAYISH GREEN	
			ACCESSORY MINERALS: QUARTZ SAND-%	
			SOFT (LIMEROCK?) STREAK AT 31.5'.	
32	-	34.5	CLAY; GRAYISH GREEN	
			ACCESSORY MINERALS: QUARTZ SAND- %, SHELL-%	
34.5-		97	CLAY; LIGHT GRAY TO GREEN	
			ACCESSORY MINERALS: QUARTZ SAND- %, LIMESTONE- %, SHELL-%	
			COARSE SANDY CLAY. DECOMPOSED LIMEROCK.	
97	-	128	CLAY; GREEN	
			ACCESSORY MINERALS: QUARTZ SAND-%	
			SOFT SANDY CLAY, LITTLE SHELL.	
128	-	130	CLAY; MODERATE GRAY TO GREEN	
			SANDY CLAY, SHELL CEMENTATION, PHOSPHATE AND SULFUR ODOR.	
130	-	176	CLAY; BLUE	
			GOOD INDURATION	
			ACCESSORY MINERALS: PHOSPHATIC SAND-%	
			LIMEROCK STREAK 175.5-176'.	
176	-	179	CLAY; GRAYISH GREEN	
			GOOD INDURATION	
			ACCESSORY MINERALS: QUARTZ SAND-%	
179	-	180	CLAY; GRAYISH GREEN	
			ACCESSORY MINERALS: QUARTZ SAND-%	
			SOFT.	
180	-	194	CLAY;	
			ALTERNATELY HARD AND SOFT STREAKS OF CLAY AND CLAYEY LS.	
194	-	213	CLAY; BLUE	
			GOOD INDURATION	
			ACCESSORY MINERALS: QUARTZ SAND-%	
			HARD, SANDY CLAY TURNING TO PLASTIC CLAY.	
213	-	226	LIMESTONE; WHITE	
			MODERATE INDURATION	

226 - 230 LIMESTONE;  
 SOFT LS TURNING HARDER.

230 - 231.5 LIMESTONE;  
 GOOD INDURATION

231.5- 232 LIMESTONE;  
 POOR INDURATION  
 ACCESSORY MINERALS: QUARTZ SAND- %, CLAY- %, SHELL- %  
 OTHER FEATURES: FOSSILIFEROUS  
 SOFT LS WITH FOSSILS AND SHELL AND SANDY CLAY STREAKS.

232 - 248 LIMESTONE;  
 SOFT DECOMPOSED LIMEROCK, SANDY CLAY AND SOME SHELL  
 IMBEDDED.

248 - 253 SAND; GRAYISH GREEN  
 ACCESSORY MINERALS: PHOSPHATIC GRAVEL-01%, SHELL-01%

253 - 260 LIMESTONE;  
 SOFT, CLAYEY, SANDY, WHITE LS. SHELL PARTICLES.

260 - 270 LIMESTONE; MODERATE GRAY TO WHITE  
 ACCESSORY MINERALS: SHELL- %, QUARTZ SAND- %  
 OTHER FEATURES: WEATHERED, FOSSILIFEROUS  
 HARDER DECOMPOSED LIMEROCK, SHELL, FOSSILS, LITTLE SAND.

270 - 274 LIMESTONE; MODERATE GRAY  
 POOR INDURATION  
 ACCESSORY MINERALS: CLAY- %, QUARTZ SAND- %, SHELL-%

274 - 288 LIMESTONE;  
 HARDER, SANDY LIMEROCK STREAKS WITH CLAY.

288 - 304 LIMESTONE;  
 SEDIMENTARY STRUCTURES: STREAKED  
 ACCESSORY MINERALS: QUARTZ SAND- %, SHELL-%  
 MEDIUM HARD, SANDY, GRAY, STREAKED, FOSSILS AND SOME SHELL.

304 - 318 CLAY;  
 GOOD INDURATION  
 HARD, GREENISH GRAY SANDY CLAY WITH SHELL PARTICLES.

318 - 320 LIMESTONE; WHITE  
 ACCESSORY MINERALS: CLAY- %, SHELL- %  
 OTHER FEATURES: FOSSILIFEROUS, WEATHERED  
 DECOMPOSED LIMEROCK WITH FOSSILS, SHELL AND CLAY STREAKS.

320 - 327 LIMESTONE; WHITE  
 CLAYEY WHITE LIMEROCK WITH STREAKS OF BLUE-GREEN SANDY  
 CLAY.

327 - 334.5 CLAY; BLUE  
 GOOD INDURATION  
 OTHER FEATURES: PLASTIC

334.5 TOTAL DEPTH