Executive Summary ROMP Site 76

<u>Location</u> - ROMP Site No. 76 is located on Pine Avenue approximately .15 miles north of its intersection with State Route 33 near Polk City in Polk County. The site is located in Section 32, Township 26 South, Range 25 East and at latitude 28⁰10'52", longitude 81⁰49'50".

<u>Site Easement</u> - This site was obtained from Polk County on December 12, 1978 for the sum of one dollar. The Perpetual Easement is 122.3 feet by 150 feet. Due to the vastness of this plot it was not necessary to obtain a temporary construction easement. The easement is recorded in Book 1853, Pages 279 through 281 of the Polk County Courthouse.

<u>Geology</u> - The site is located on the Sunderland Terrace at an elevation of approximately 135 feet above mean sea level (MSL). All geologic data was obtained from drill stem cuttings from the surface to 315 feet below land surface datum (LSD). The generalized geology of this site is as

follows: 0 - 100' Sand, clay and marl

100'-295' Ocala Group

295'-315' Avon Park Limestone

<u>Hydrogeology</u> - Since geophysical logs, water samples, and water levels were not collected and there were no pumping tests conducted at this site no attempt can be made at describing the hydrogeology at this site.

Well Construction - The well at this site was constructed by using the District owned Portadrill between October 24 and November 14, 1978 at a cost of \$6,492 or \$20.61 per foot.

The well was constructed by using 52 feet of 16 inch and 93 feet of 12 inch steel work casing and 264 feet of 6 inch PVC casing. After the casings were cemented in place and allowed to cure the well was drilled out to

315 feet. The open section of this well monitors the bottom of the Ocala and top of the Avon Park formations.

Prior to the installation of this well a second shallower well existed at this site. This well was 73.5 feet deep and was lined with 52.5 feet of steel casing. This well was constructed by Williams and Associates in April, 1974 under a contract administered to by the U.S.G.S. Since this well was finished in an area of sands and clays and did not seem to function properly it was decided by SWFWMD and U.S.G.S. personnel to pull the well casing and cement the well bore up with grout. This well was destroyed on November 14, 1978.

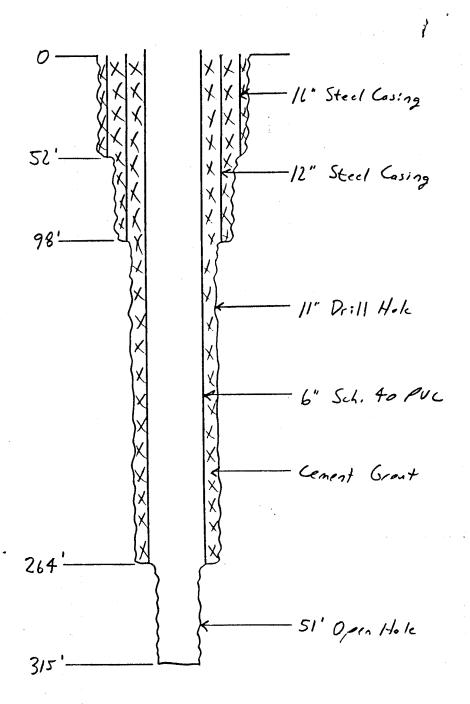
<u>Geophysical Logs</u> - Logs were not taken on this well due to mechanical malfunctions of the SWFWMD logger unit and the USGS logger was not available for use at this time.

Type of Monitor - this well is designed to monitor the potentiometric levels in the Avon Park limestone.

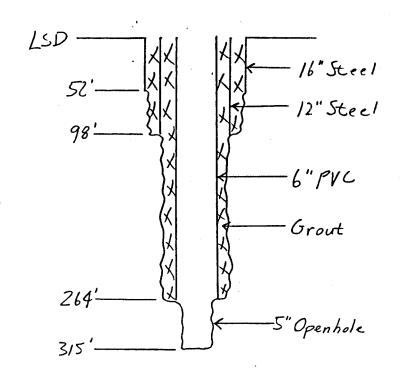
Water Quality - Water samples were not obtained at this site.

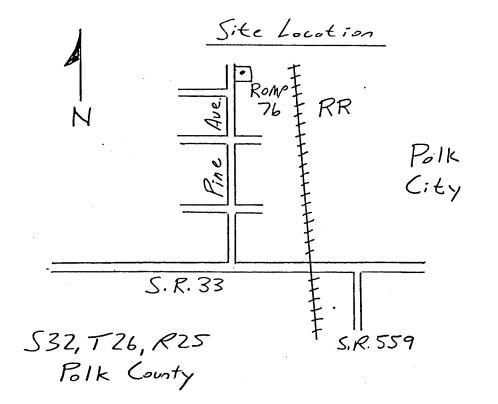
<u>U.S.G.S. Notification</u> - SWFWMD Planning Section was notified on April 23, 1979 that this well was completed. The U.S.G.S. installed a recorder on this well on November 14, 1978. This recorder was transferred from the shallower well to the new well at the time of its completion.

AS BUILT WELL DIAGRAM ROMY 76



As Built Well Diagrom





 \mathbb{IIB}

		+150
Sch. 40	Clay i Sond w/some Limestone lenses	+100
PVC		+50
	Crystal River	0-MSL
	Willisten Inglis.	- 50
±220 ±250	Aven Park	-100

Based on well 811-149-1 located 1 mile NNE of Site # 76 USGS R.I. 42

8/14/78 M6s LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W- 14389

COUNTY - POLK

TOTAL DEPTH: 00315 FT.

LOCATION: T.26S R.25E S.32 LAT = N 28D 10M 52

SAMPLES - NONE

LON = W 81D 49M 50

COMPLETION DATE - 11/14/78

OTHER TYPES OF LOGS AVAILABLE - NONE

ELEVATION - 135 FT

OWNER/DRILLER: SWFWMD; ROMP SITE # 76.

WORKED BY: CODED AND ENTERED BY RICHARD GREEN 8/90 FROM A GEOLOGIST'S (UNKNOWN) DESCRIPTION OF CUTTINGS.

THIS SITE IS LOCATED ON PINE AVE. APPROX .15 MILES NORTH OF ITS INTERSECTION WITH STATE ROUTE 33 NEAR POLK CITY IN POLK COUNTY.

0. - 100. UNDIFFERENTIATED SAND AND CLAY

100. - 295. OCALA GROUP 295. - 315. AVON PARK FM.

0 - 5 SAND; MODERATE GRAY TO TAN; GRAIN SIZE: MEDIUM;

5 - 10 SAND; ORANGE TO TAN; POOR INDURATION; ACCESSORY MINERALS: CLAY-05%; CONTAINS MINOR CLAY AND VERY LOOSELY CEMENTED LENSES OF CLAYEY SAND.

10 - 15 SAND; MODERATE GRAY; GRAIN SIZE: MEDIUM;

15 - 20 NO SAMPLES

20 -25 SAND; MODERATE GRAY TO TAN; GRAIN SIZE: FINE;

25 - 30 SAND; MODERATE GRAY; RANGE: MEDIUM TO FINE; ACCESSORY MINERALS: CLAY-%;

30 - 35 SAND; MODERATE GRAY TO TAN; ACCESSORY MINERALS: CLAY-%; SLIGHTLY CLAYEY.

35 - 40 NO SAMPLES

40 - 45 LIMESTONE; MODERATE GRAY TO TAN;

GRAIN TYPE: CALCILUTITE, SKELETAL;

CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;

ACCESSORY MINERALS: QUARTZ SAND- %, CLAY- %, CALCILUTITE- %, PHOSPHATIC SAND-01%;

FOSSILS: MOLLUSKS;

MARL. COARSE-MED. CLAYEY QTZ SAND. MANY MICRITIC PELECYPOD AND GASTROPOD FOSSILS.

- 45 50 AS ABOVE
- 50 55 LIMESTONE; WHITE;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

OTHER FEATURES: CHALKY, FOSSILIFEROUS;

FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, ECHINOID;

GRAINY, CONTAINS LEPIDOCYCLINA.

55 - 60 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

POOR INDURATION;

ACCESSORY MINERALS: CLAY- %;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS;

PACKED BIOMICRITE, FRIABLE. CONTAINS SMALL LENSES OF GREY INDURATED CLAY. MANY

PELECYPOD, GASTROPOD, AND LEPS.

60 - 65 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: MOLLUSKS, ECHINOID, BENTHIC FORAMINIFERA;

PACKED BIOMICRITE. ABUNDANT LEPS, AND OTHER FOSSILS.

65 - 70 SAND; OLIVE GRAY;

GRAIN SIZE: FINE; POOR INDURATION;

CEMENT TYPE(S): CLAY MATRIX;

ACCESSORY MINERALS: CLAY-%;

STICKY, CLAYEY QTZ SAND.

- 70 75 AS ABOVE
- 75 80 NO SAMPLES
- 80 85 LIMESTONE; MODERATE GRAY;

CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX;

ACCESSORY MINERALS: QUARTZ SAND- %, CALCILUTITE- %, CLAY-%;

MARL, GRAY CLAY, QTZ SAND AND WHITE MICRITE GRAINS.

- 85 90 NO SAMPLES
- 90 95 NO SAMPLES

95 - 100 NO SAMPLES

100 - 105 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

POOR INDURATION;

ACCESSORY MINERALS: QUARTZ SAND- %;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA;

PACKED BIOMICRITE. FRIABLE. CONTAINS ABUNDANT QTZ SAND, MANY PELECYPODS, GASTROPODS, AND

LEPS.

105 - 110 AS ABOVE

110 - 115 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

POOR INDURATION;

OTHER FEATURES: FOSSILIFEROUS, FROSTED, MEDIUM RECRYSTALLIZATION;

PACKED BIOMICRITE. FRIABLE. CONTAINS MANY MOLLUSKS AND LEPIDOCYCLINA.

115 - 120 AS ABOVE

120 - 125 AS ABOVE

125 - 130 AS ABOVE

130 - 135 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

POOR INDURATION;

ACCESSORY MINERALS: CHERT- %;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS;

PACKED BIOMICRITE. FRIABLE. SMALL LENSES OF BROWNISH GRAY CHERT. LEPIDOCYCLINA.

135 - 140 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

POOR INDURATION;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA, BRYOZOA, ECHINOID;

PACKED BIOMICRITE. MORE FINE GRAINED THAN ABOVE.

140 - 145 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID;

PACKED BIOMICRITE. CONTAINS MANY LARGE FORAMS, PELECYPOD AND ECHINOID FRAGS.

145 - 150 AS ABOVE

150 - 155 AS ABOVE

PAGE - 4

155 - 160 AS ABOVE

SOMEWHAT MORE GRAINY THAN 140-145'.

160 - 165 AS ABOVE

165 - 170 LIMESTONE; WHITE;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

POOR INDURATION;

ACCESSORY MINERALS: CHERT- %;

OTHER FEATURES: CHALKY;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS;

PACKED BIOMICRITE. FRIABLE. CONTAINS MANY LEPS AND OTHER FORAMS AND PELECYPODS. CONTAINS

LENSES OF DARK BROWNISH GRAY CHERT.

170 - 175 AS ABOVE

175 - 180 AS ABOVE

180 - 185 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

OTHER FEATURES: FOSSILIFEROUS:

FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, ECHINOID;

PACKED BIOMICRITE. MORE FINE GRAINED THAN ABOVE. CONTAINS LEPS., PELECYPODS, AND ECHINOID

SPINES.

185 - 190 AS ABOVE

190 - 195 LIMESTONE; CREAM;

PACKED BIOMICRITE. ESSENTIALLY A LEPIDOCYCLINA COQUINA.

195 - 200 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MOLLUSKS;

PACKED BIOMICRITE. CONTAINS MANY SMALL LEPS., ECHINOID AND PELECYPOD FRAGMENTS.

200 - 205 AS ABOVE

205 - 210 AS ABOVE

210 - 215 AS ABOVE

215 - 220 AS ABOVE

220 - 225 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

GRAIN SIZE: FINE;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA;

PACKED TO SPARSE BIOMICRITE. ABUNDANT FORAMS.

225 - 230 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

ACCESSORY MINERALS: QUARTZ SAND- %;

FOSSILS: BENTHIC FORAMINIFERA;

PACKED BIOMICRITE. ABUNDANT FORAMS AND QTZ SAND.

230 - 235 AS ABOVE

235 - 240 AS ABOVE

240 - 245 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
ACCESSORY MINERALS: QUARTZ SAND- %, SPAR- %;

OTHER FEATURES: CHALKY;

PACKED BIOMICRITE.

245 - 250 AS ABOVE

250 - 255 LIMESTONE; CREAM TO TAN;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

ACCESSORY MINERALS: SPAR- %;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS;

SPARRY SPARSE BIOMICRITE.

255 - 260 NO SAMPLES

260 - 265 LIMESTONE; CREAM TO TAN;

GRAIN TYPE: BIOGENIC, CRYSTALS, CALCILUTITE;

ACCESSORY MINERALS: SPAR- %;

OTHER FEATURES: FOSSILIFEROUS;

FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA;

SPARRY PACKED BIOMICRITE. ABUNDANT MOLLUSKS AND FORAMS.

265 - 270 AS ABOVE

270 - 275 AS ABOVE

275 - 280 AS ABOVE

280 - 285 AS ABOVE

285 - 290 AS ABOVE

290 - 295 AS ABOVE

295 - 300 LIMESTONE; CREAM;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

GRAIN SIZE: FINE;

ACCESSORY MINERALS: SPAR- %;

OTHER FEATURES: FOSSILIFEROUS, CHALKY;

FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MOLLUSKS;

SPARRY PACKED BIOMICRITE. CONTAINS DICTYOCONUS COOKEI, AND MANY OTHER FORAMS, MOLLUSKS,

AND ECHINOID FRAGS.

300 - 305 AS ABOVE

305 - 310 AS ABOVE

310 - 315 AS ABOVE

315 TOTAL DEPTH