Executive Summary ROMP Site No. 32
Two Monitor Wells

<u>Location</u> - ROMP Site No. 32 is located next to an orange grove along State Route No. 64 approximately .6 mile west of the Manatee-Hardee County line in Manatee County. The site is located in Section 36, Township 34 South, Range 22 East and at latitude $27^{\circ}28'12''$, longitude $82^{\circ}03'51''$.

Site Easements - This site was obtained from W. H. and Opal B. Rooney on June 22, 1977 for the sum of one dollar. The Perpetual Easement is 20 feet by 20 feet and the Temporary Construction Easement which adjoins the Perpetual Easement is 30 feet by 50 feet. The Temporary Easement was also obtained on June 22, 1977 for a period of 12 months and expired on June 21, 1978. A Release of Oil and Gas Lease was obtained on July 15, 1977 from the Mobil Oil Corporation. These documents are recorded in O.R. Book 858, Pages 443 through 454. An additional Temporary Construction Easement was obtained from the same party on April 24, 1979 for a period of 6 months in order to repair one of the monitor wells that the Contractor failed to complete. This Easement expired on October 23, 1979 and is recorded in O.R. Book 954, Pages 631 and 632 in the Manatee County Courthouse.

Geology - This site is located on the southern edge of the Sunderland Terrace at an elevation of approximately 104 feet above mean sea level (MSL). Geologic information was obtained from drill cuttings from land surface to 1215 feet below land surface datum (LSD). The general geology of the site is as follows:

0 - 25

Sand

25-208

Hawthorn Formation

208-450 Tampa Limestone 450-710 Suwannee Limestone 710-958 Ocala Group 958-1215 Avon Park Limestone

Hydrogeology - There are two principle artesian aquifers at this site. The first artesian zone is found in the lower Tampa and most of the Suwannee limestones. This zone is separated from the water table by the upper Tampa and Hawthorn limestones and clays which act as a confiner. Except for an area between 172 and 208 feet below LSD which is mostly limestone, this confining layer is approximately 300 feet thick.

The second artesian zone is found in the lower Ocala group and Avon Park limestone. It is separated from the first artesian aquifer by the upper Ocala group which is tight and acts as a confining layer.

No pumping tests were conducted at this site.

<u>Well Construction</u> - These wells were constructed under Contract 688, the Myakka Head Contract, by Meridith Corporation.

1. Well No. 1 - the deep well or Avon Park Monitor was constructed between October 3 and November 18, 1977 for a Contract amount of \$61,745.15 or \$50.82. During the construction of this well and in more particular during the grouting operation a rupture occurred in the PVC well casing between 260 and 262 feet below LSD. Terms were reached between the District and the Contractor where it was agreed that the District would repair the well with a liner. This work was completed between August 13 and 16, 1979 at a cost of \$

This well was constructed by using 150 feet of 14 inch steel casing and 60 feet of 8 inch with a reducer to a 6 inch and 849' of 6 inch PVC for a total of 909 feet of PVC well casing. After the casings were grouted

in place the well was drilled out to a total depth of 1255 feet below LSD.

The liner at this site consists of 40 feet of 4 inch PVC that was equipped with a shale packer and assorted rubber rings at the bottom inorder to form a seal between the 4 and 6 inch pipe. This liner was set between the depth of 240 to 280 feet and grouted in order to seal off the ruptured area in the 6 inch PVC.

B. Well No. 2 - the shallower or Suwannee monitor well was constructed between November 23 and December 21, 1977 at a cost of \$33,865.25 or \$56.44 per foot.

The Suwannee well was constructed by using 150 feet of 14 inch steel casing and 560 feet of 6 inch PVC well casing both of which were grouted in place. The well was then drilled out to 592 feet.

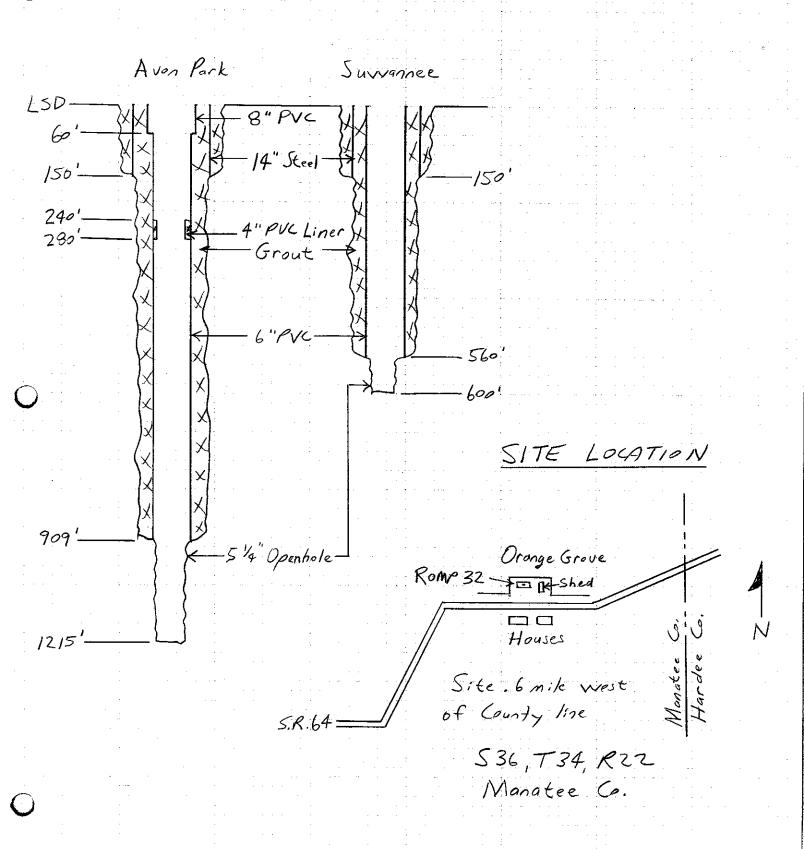
Geophysical Logs - Electric, caliper, gamma, fluid resistivity, temperature, neutron, and acoustic-velocity logs were run on the Avon Park well.

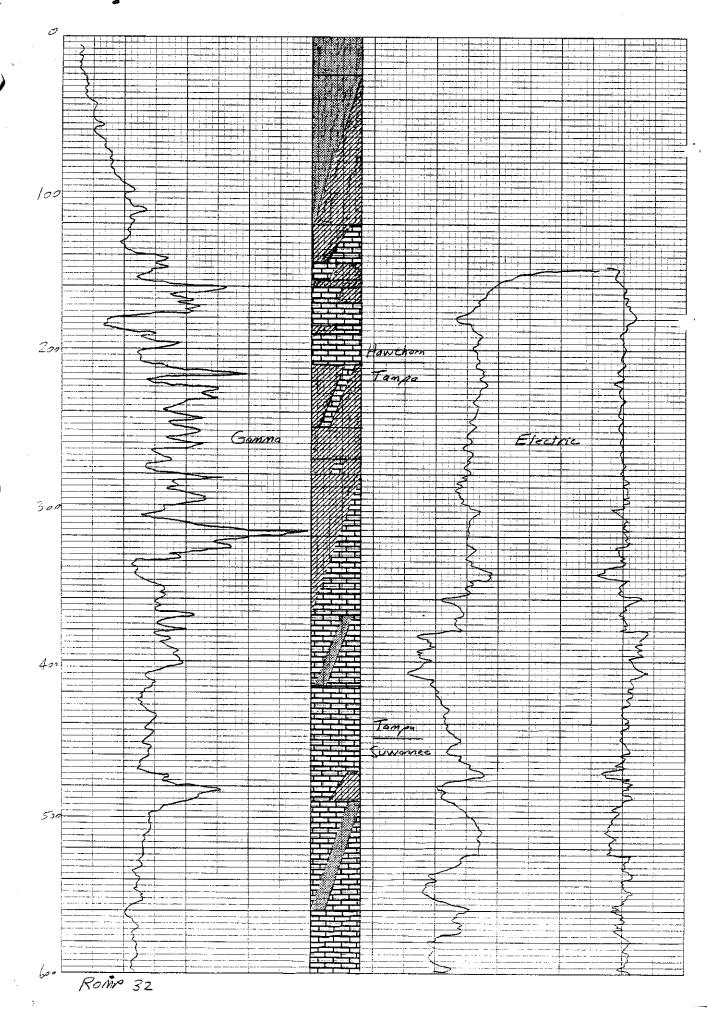
Type of Monitor - Both of these wells are designed to monitor potentiometric levels. The shallower well is used to monitor the artesian levels in the Suwannee Limestone and the deep well to monitor the Avon Park limestone.

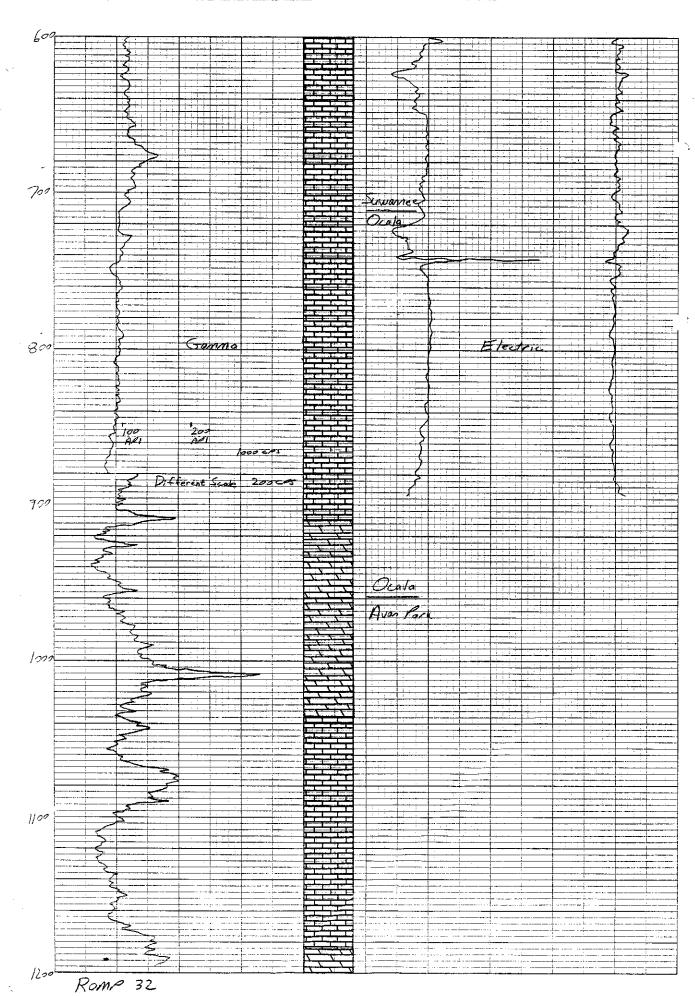
<u>Water Quality</u> - Apparently no water samples were collected during the construction of this well.

<u>U.S.G.S. Notification</u> - SWFWMD Technical Information Section was notified on 10/1/79 that these wells are complete and ready for monitoring.

WELL DIAGRAMS







LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FBOG

WELL NUMBER: W-16257

COUNTY - MANATEE

TOTAL DEPTH: 00060 FT.

LOCATION: T.34S R.22E

S.36

20 SAMPLES FROM 1 TO 60 FT.

LAT = 27D 28M

LON = 82D 03M

45S

COMPLETION DATE: N/A

ELEVATION: N/A FT

OTHER TYPES OF LOGS AVAILABLE - NONE

OWNER/DRILLER:S.W.F.W.M.D. [ROMP SITE 32]

WORKED BY: RICHARD GREEN (5-1988)

- 0 1 SAND; VERY LIGHT ORANGE TO GRAYISH BROWN POROSITY: INTERGRANULAR GRAIN SIZE: MEDIUM; RANGE: FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: PLANT REMAINS-05%, ORGANICS-10% CLAY-03%, HEAVY MINERALS-01% OTHER FEATURES: UNWASHED SAMPLE FOSSILS: NO FOSSILS
- 3 SAND; VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: MEDIUM; RANGE: FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: PLANT REMAINS-01%, CLAY-02% **HEAVY MINERALS-01%** OTHER FEATURES: UNWASHED SAMPLE FOSSILS: NO FOSSILS
- SAND; GRAYISH BROWN TO DARK YELLOWISH BROWN POROSITY: INTERGRANULAR GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO FINE ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: HEAVY MINERALS-01%, CLAY-01% OTHER FEATURES: UNWASHED SAMPLE FOSSILS: NO FOSSILS
- 5 ~ SAND; GRAYISH BROWN TO DARK BROWN POROSITY: INTERGRANULAR GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: HEAVY MINERALS-01%, ORGANICS-10% OTHER FEATURES: UNWASHED SAMPLE FOSSILS: NO FOSSILS
- SAND; DARK BROWN TO GRAYISH BROWN POROSITY: INTERGRANULAR GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO COARSE ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY POOR INDURATION CEMENT TYPE(S): ORGANIC MATRIX

ACCESSORY MINERALS: ORGANICS-35% OTHER FEATURES: UNWASHED SAMPLE FOSSILS: NO FOSSILS

- 9 11 SAND; DARK BROWN TO GRAYISH BROWN
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO COARSE
 ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY
 POOR INDURATION
 CEMENT TYPE(S): ORGANIC MATRIX
 ACCESSORY MINERALS: ORGANICS-30%
 OTHER FEATURES: UNWASHED SAMPLE
 FOSSILS: NO FOSSILS
- 11 13 SAND; DARK BROWN TO GRAYISH BROWN
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO COARSE
 ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY
 POOR INDURATION
 CEMENT TYPE(S): ORGANIC MATRIX
 ACCESSORY MINERALS: ORGANICS-30%
 OTHER FEATURES: UNWASHED SAMPLE
 FOSSILS: NO FOSSILS
- 13 18 SAND; MODERATE BROWN TO GRAYISH BROWN
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO VERY FINE
 ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: ORGANICS-25%
 OTHER FEATURES: UNWASHED SAMPLE
 FOSSILS: NO FOSSILS
- 18 21 SAND; GRAYISH BROWN TO MODERATE BROWN
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO VERY FINE
 ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY
 POOR INDURATION
 CEMENT TYPE(S): ORGANIC MATRIX
 ACCESSORY MINERALS: ORGANICS-20%, HEAVY MINERALS-01%
 OTHER FEATURES: UNWASHED SAMPLE
 FOSSILS: NO FOSSILS
- 21 25 SAND; MODERATE BROWN TO MODERATE BROWN
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE
 ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: ORGANICS-10%, CLAY-05%
 HEAVY MINERALS-01%
 OTHER FEATURES: UNWASHED SAMPLE
 FOSSILS: NO FOSSILS
- 25 30 SAND; GRAYISH BROWN TO MODERATE YELLOWISH BROWN
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM
 ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: CLAY-05%, HEAVY MINERALS-01%
 ORGANICS-05%

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OTHER FEATURES: UNWASHED SAMPLE

FOSSILS: NO FOSSILS

30 - 35 SAND; VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM

ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: HEAVY MINERALS-01%, CLAY-02%

OTHER FEATURES: UNWASHED SAMPLE

FOSSILS: NO FOSSILS

35 - 40 SAND; VERY LIGHT ORANGE TO GRAYISH BROWN

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM

ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: CLAY-07%, HEAVY MINERALS-01%

OTHER FEATURES: UNWASHED SAMPLE

FOSSILS: NO FOSSILS

40 - 45 SAND; LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM

ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: CLAY-07%, HEAVY MINERALS-01%

PHOSPHATIC SAND-01%, DOLOMITE-01%

OTHER FEATURES: UNWASHED SAMPLE, DOLOMITIC

FOSSILS: NO FOSSILS

1% DOLOMITIC FRAGS.; TAN-GRAY COLOR; PHOSPHATE IS BLACK

IN

COLOR

45 - 50 SAND; LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE

ROUNDNESS: SUB-ANGULAR TO ANGULAR; MEDIUM SPHERICITY

POOR INDURATION

CEMENT TYPE(S): CLAY MATRIX

ACCESSORY MINERALS: CLAY-20%, HEAVY MINERALS-01%

PHOSPHATIC SAND-02%

OTHER FEATURES: UNWASHED SAMPLE

FOSSILS: NO FOSSILS

PHOS. IS BLACK-BROWN, MED. SAND SIZE

50 - 55 SAND; OLIVE GRAY TO DARK GRAY

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: GRAVEL TO FINE

ROUNDNESS: SUB-ANGULAR TO ROUNDED; LOW SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-12%

PHOSPHATIC GRAVEL-03%

OTHER FEATURES: UNWASHED SAMPLE, CALCAREOUS, DOLOMITIC

FOSSILS: SHARKS TEETH

SLIGHTLY DOLOMITIC; PHOS. IS BLK-BROWN, WELL ROUNDED;

LARGER

PHOS. FRAGS ARE SHARK TEETH

55 - 60 SAND; OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE; MEDIUM TO FINE

ROUNDNESS: SUB-ANGULAR TO ROUNDED; MEDIUM SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-10%

OTHER FEATURES: UNWASHED SAMPLE, CALCAREOUS, DOLOMITIC

60 TOTAL DEPTH