

Executive Summary
ROMP Site 107
Core and Monitor Well

Location - ROMP Site No. 107 is located on U.S. 98 at the entrance to the Florida Mining and Materials Corporation approximately 5.5 miles northwest of Brooksville and 2.85 miles northwest of the intersection of U.S. 98 and S.R. 476 in Hernando County. ROMP 107 is located in Section 13, Township 21 South, Range 18 East and at latitude 28°39'24", longitude 82°27'23".

Site Easement - This site was obtained from the Florida Mining and Materials Corporation on April 20, 1976 for the sum of one dollar. The Perpetual Easement is 20 feet by 60 feet and adjoins the Temporary Construction Easement which is 40 feet by 60 feet. The Temporary Easement was obtained on April 20, 1976 for a period of 12 months and expired on April 19, 1977. Both documents are recorded in O.R. Book 381, Pages 859 through 864 at the Hernando County Courthouse.

Reason for Coring - This site was cored due to the lack of available geologic and hydrologic information in this area.

Geology - This site is located on the Sunderland Terrace at an elevation of \pm 116 feet above mean sea level (MSL). Geologic information was obtained from wireline core samples which were obtained from land surface datum (LSD) to 344.5 feet below LSD. The general geology of this site is as follows.

0-45' Alachua Formation
45'-70' Suwannee Limestone
70'-210' Ocala Group
210'-344' Avon Park Limestone

Hydrogeology - Apparently only one artesian zone exists at this site from \pm 45 feet to \pm 344 feet below LSD. The clays of the Alachua Formation act

as a confining layer above this artesian zone which is found at a depth of + 104 feet below LSD.

No pumping tests were conducted at this site so there is not any information available on permeabilities or transmissivities.

Core Drilling - This site was cored by the District owned CME between July 26 and September 16, 1976, at a cost of \$ or \$ per foot. Wireline core samples were obtained from LSD to 344.5 feet below LSD. The samples were boxed up and sent to the University of Florida for in depth analysis.

Well Construction - This well was constructed with the District owned Portadrill between October 7 and December 1, 1976 at a cost of \$21,770 or \$90.71 per foot.

This well was constructed by using 50 feet of 16 inch steel work casing and 140 feet of 8 inch PVC well casing. Both casings were cemented in place and then the well was drilled out to 240 feet and developed.

Geophysical Logs - Electric, caliper, gamma, fluid resistivity, and temperature logs were run on the monitor well on March 4, 1977.

Type of Monitor - This well is designed to monitor the Ocala and Avon Park formations which act as a single hydrologic unit in this area.

Water Quality - During the coring of this site, 7 conductivity measurements were obtained at 30 foot intervals from 144.5 to 344.5 feet. All 7 readings range from 360 to 465 micromhos which would indicate that the water is low in total dissolved solids.

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

LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W- 13518

COUNTY - HERNANDO

TOTAL DEPTH: 00344 FT.

LOCATION: T.21S R.18E S.13

SAMPLES - NONE

LAT = N 28D 39M 24

LON = W 82D 27M 23

COMPLETION DATE - 09/16/76

ELEVATION - 116 FT

OTHER TYPES OF LOGS AVAILABLE - CALIPER, GAMMA, FLUID CONDUCTIVITY, TEMPERAT

OWNER/DRILLER: SWFMD; ROMP SITE # 107; CORE AND MONITOR WELL.

WORKED BY: CODED AND ENTERED BY RICHARD GREEN 8/90 FROM A GEOLOGIST'S
(FREEDOM) LOG.

THIS CORE IS LOCATED ON U.S. 98 AT THE ENTRANCE TO THE
FLORIDA MINING AND MATERIALS CORP. APPROX. 5.5 MILES
NORTHWEST OF BROOKSVILLE AND 2.85 MILES NW OF THE
INTERSECTION OF U.S. 98 AND S.R. 476 IN HERNANDO COUNTY.

- 0. - 45. ALACHUA FM.
- 45. - 70. SUWANNEE LIMESTONE
- 70. - 210. OCALA GROUP
- 210. - 344. AVON PARK FM.

- 0 - 9.5 CLAY; BROWN;
STIFF

- 9.5- 10 CHERT; MODERATE GRAY TO CREAM;
SILICIFIED BIOMICRITE. GRAYISH CREAM.

- 10 - 14 LIMESTONE; CREAM TO MODERATE GRAY; POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
MODERATE INDURATION;
SEDIMENTARY STRUCTURES: MOTTLED,
PACKED BIOMICRITE. CONTAINS DENSE, HARD, SILICIFIED ZONES. POROSITY IS HIGH DUE TO
LEACHING OF SMALL FOSSILS. POOR FOSSIL PRESERVATION.

- 14 - 18.5 CLAY; DARK YELLOWISH BROWN; LOW PERMEABILITY;
ACCESSORY MINERALS: CALCILUTITE- %, QUARTZ SAND- %, IRON STAIN-%;
CLAY AND LIMESTONE- MICRITE, IRON STAINED IN CAVITIES. CLAY CONTAINS FINE, WELL ROUNDED
QTZ SAND.

- 18.5- 19.5 AS ABOVE
MUCH THE SAME AS ABOVE WITH MORE IRON STAIN.

- 19.5- 30 NO SAMPLES

- 30 - 45 LIMESTONE; ;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
MODERATE INDURATION;
ACCESSORY MINERALS: IRON STAIN- %, CLAY- %, SPAR- %;
OTHER FEATURES: POOR SAMPLE, FOSSILIFEROUS;
FOSSILS: MOLLUSKS;
LITTLE RECOVERY-- 2.5' OF BROKEN PACKED BIOMICRITE, WELL LITHIFIED, IRON STAINED. CONTAINS OYSTERS, TURRITELLA, DRUSE LINED MOLDS AND CAVITIES. APPEARS TO BE MOSTLY CLAYS LOST IN CORING.
- 45 - 70 LIMESTONE; CREAM TO WHITE; VUGULAR;
GRAIN TYPE: CALCILUTITE;
ACCESSORY MINERALS: SPAR- %;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILIFEROUS MICRITE. CONTAINS SOME SOLUTION VOIDS WHICH ARE DRUSE LINED, LEACHED FOSSILS THROUGHOUT.
- 70 - 84 LIMESTONE; CREAM TO LIGHT ORANGE;
GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
POOR INDURATION;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: BENTHIC FORAMINIFERA, CORAL;
PACKED BIOMICRITE. SOFT, PASTY, FRIABLE IN PLACES. SOMEWHAT PUNKY IN ZONES. CONTAINS MANY LEPS, OPERCS, NUMMULITES. SMALL CORALS AND FORAMS FORM BULK OF ROCK.
- 84 - 93 LIMESTONE; LIGHT ORANGE; PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
POOR INDURATION;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: BENTHIC FORAMINIFERA;
FOSSILIFEROUS MICRITE, PUNKY, FRIABLE. RARE LEPS, OPERCS, CORALS, NUMMULITES. POROSITY IS FINE LEACHED MICRO FORAMS CAUSING ROCK TO BE LOW DENSITY.
- 93 - 210 LIMESTONE; WHITE TO CREAM; POSSIBLY HIGH PERMEABILITY, LOW PERMEABILITY, VUGULAR;
GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
POOR INDURATION;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS;
PACKED TO FOSSILIFEROUS BIOMICRITE. SOFT, PASTY, FRIABLE IN PLACES. CONTAINS ZONES OF ABUNDANT FORAMS. ABUNDANT LEPS, OPERCS, NUMMULITES, GASTROPODS, AND PELECYPODS. POROSITY CONSISTS OF ZONES OF LEACHED LARGE FOSSILS AND ZONES OF LEACHED SMALL FOSSILS GIVING ZONES OF HIGH AND LOW POROSITY. GRADES FROM PUNKY TO WELL LITHIFIED.

- 210 - 211.5 LIMESTONE; WHITE TO MODERATE GRAY; LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
GRAIN SIZE: VERY FINE;
ACCESSORY MINERALS: ORGANICS- %;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: BENTHIC FORAMINIFERA;
FOSSILIFEROUS MICRITE. LIGNITIC. CONTAINS LENSES OF LIGNITE AND CARBONACEOUS MATTER
DISPERSED IN ZONES. RARE ARCHAIA AND OTHER FORAMS. V. LOW POROSITY.
- 211.5- 216.5 LIMESTONE; MODERATE GRAY TO TAN;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
ACCESSORY MINERALS: ORGANICS- %;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: FOSSIL FRAGMENTS, OSTRACODS;
POORLY WASHED BIOSPARITE. CONTAINS SHELL HASH. ABUNDANT OSTRACODS, SMALL FLECKS OF
CARBONACEOUS MATTER. CM THICK LENSES OF LIGNITE AT BOTTOM.
- 216.5- 221 LIMESTONE; MODERATE GRAY TO TAN;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: BENTHIC FORAMINIFERA, OSTRACODS, ECHINOID, CORAL;
POORLY WASHED BIOSPARITE. ABUNDANT FOSSILS.
- 221 - 222.5 LIMESTONE; MODERATE GRAY TO TAN;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
POOR INDURATION;
OTHER FEATURES: WEATHERED;
FOSSILS: BENTHIC FORAMINIFERA, OSTRACODS;
PACKED POORLY WASHED BIOSPARITE, VERY SOFT, PASTY. CONTAINS COSKINOLINA FLORIDANA.
- 222.5- 223.5 LIMESTONE; WHITE; LOW PERMEABILITY, MOLDIC;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
GOOD INDURATION;
ACCESSORY MINERALS: PYRITE-01%;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: FOSSIL MOLDS, BENTHIC FORAMINIFERA, OSTRACODS;
PACKED BIOSPARITE WITH MANY FOSSILS REPLACED BY WHITE MICRITE. TRACE OF PYRITE VEINS,
OSTRACODS, FORAMS AND PELECYPOD MOLDS. VERY LOW POROSITY.
- 223.5- 229 LIMESTONE; ; POSSIBLY HIGH PERMEABILITY, PIN POINT VUGS;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
ACCESSORY MINERALS: ORGANICS- %;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: BENTHIC FORAMINIFERA, OSTRACODS, MOLLUSKS, ECHINOID, CORAL;
PACKED POORLY WASHED BIOSPARITE. CONTAINS EVENLY SPACED MM SIZE SECONDARY POROSITY. LOW
DENSITY. VERY MINOR VEINS OF CARBONACEOUS MATTER. DICTYOCONUS COOKEI AND LEPIDOCYCLINA.

- 229 - 232 LIMESTONE; TAN;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
GOOD INDURATION;
CEMENT TYPE(S): SPARRY CALCITE CEMENT;
OTHER FEATURES: DOLOMITIC, FOSSILIFEROUS;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, OSTRACODS, ORGANICS, ALGAE;
BIOSPARITE. SANDY APPEARANCE DUE TO MINUTE CALCITE CRYSTALS, SLIGHTLY DOLOMITIC. CONTAINS ALGAE IMPRESSIONS, FRAGMENTS OF WELL PRESERVED WOODY MATERIAL.
- 232 - 237 LIMESTONE; WHITE TO CREAM;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
MODERATE INDURATION;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA;
FOSSILIFEROUS MICRITE. VERY DENSE AT TOP, LOSING DENSITY W/ DEPTH. MINOR FOSSILS.
- 237 - 243 LIMESTONE; ;
GRAIN TYPE: BIOGENIC, CRYSTALS, CALCILUTITE;
MODERATE INDURATION;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: MOLLUSKS;
PACKED POORLY WASHED BIOSPARITE TO FOSSILIFEROUS BIOMICRITE. CHALKY. GRADES FROM WELL LITHIFIED TO PUNKY. POROSITY IS HIGHEST IN PUNKY ZONES. CONTAINS POORLY PRESERVED PELECYPODS AND GASTROPODS.
- 243 - 257 LIMESTONE; CREAM; VUGULAR;
GRAIN TYPE: CALCILUTITE, BIOGENIC, SKELETAL;
ACCESSORY MINERALS: SPAR- %, IRON STAIN- %;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, OSTRACODS;
FOSSILIFEROUS MICRITE. CONTAINS POORLY PRESERVED FOSSILS. CAVITIES FROM 1-2 INCH IN DIAMETER AT 250' AND 257'. CAVITY ZONES ARE IRON STAINED AND CONTAIN MICROCRYSTALLINE CALCITE.
- 257 - 261 LIMESTONE; CREAM; MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: OSTRACODS;
FOSSILIFEROUS TO PACKED BIOMICRITE, CONTAINS LEACHED OSTRACODES RESULTING IN A VERY UNIFORM MOLDIC POROSITY WITH APPARENTLY LOW PERM.
- 261 - 261.5 LIMESTONE; WHITE TO TAN;
GRAIN TYPE: CALCILUTITE;
OTHER FEATURES: CHALKY;
PUNKY.

- 261.5- 277 LIMESTONE; TAN; VUGULAR;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
GRAIN SIZE: MICROCRYSTALLINE; GOOD INDURATION;
ACCESSORY MINERALS: ORGANICS-%;
MICROCRYSTALLINE BIOSPARITE, DENSE, VUGGY, CONTAINS SMALL VEINS OF ORGANIC MATTER.
- 277 - 279 LIMESTONE; TAN; VUGULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CRYSTALS, SKELETAL;
GRAIN SIZE: MICROCRYSTALLINE; GOOD INDURATION;
MORE STRONGLY LITHIFIED THAN ABOVE. HIGH VUGGY POROSITY WITH LOW PERM.
- 279 - 286.5 LIMESTONE; WHITE; LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
GOOD INDURATION;
OTHER FEATURES: CHALKY, FOSSILIFEROUS;
FOSSILS: MOLLUSKS, OSTRACODS, BENTHIC FORAMINIFERA;
MICRITE, DENSE. CONTAINS MINOR FOSSILIFEROUS ZONES OF GASTROPODS, FORAMS, OSTRACODES,
MINOR ZONES OF LITHOGRAPHIC LIMESTONE.
- 286.5- 298 LIMESTONE; CREAM TO LIGHT BROWNISH GRAY; LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
MODERATE INDURATION;
SEDIMENTARY STRUCTURES: LAMINATED,
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: MOLLUSKS;
LAMINATED COLOR AND HARDNESS DUE TO VARYING AMOUNTS OF ORGANIC MATTER. CONTAINS 1" THICK
BEDS OF TURRITELLA. POROSITY IS GENERALLY VERY LOW EXCEPT FOR THE TURRITELLA BEDS. GRADES
INTO DOLOMITIC LITHOGRAPHIC LIMESTONE.
- 298 - 302 LIMESTONE; TAN; VUGULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL, CRYSTALS;
GRAIN SIZE: MICROCRYSTALLINE;
OTHER FEATURES: FOSSILIFEROUS;
FOSSILS: OSTRACODS;
FOSSILIFEROUS BIOSPARITE, CONTAINS MANY OSTRACOD MOLDS YIELDING A VUGGY TEXTURE W/
RELATIVELY LOW PERM.
- 302 - 315 LIMESTONE; CREAM; LOW PERMEABILITY;
GRAIN TYPE: SKELETAL, BIOGENIC, CALCILUTITE;
POOR INDURATION;
OTHER FEATURES: FOSSILIFEROUS, CHALKY;
FOSSILS: BENTHIC FORAMINIFERA, OSTRACODS;
PACKED BIOMICRITE, SOFT, GRAINY. FORMED CHIEFLY OF POORLY PRESERVED FORAMS AND OSTRACODES.
- 315 - 320 AS ABOVE
WITH HIGHER PRIMARY POROSITY AND FOSSILS WELL CONTAINS LAMINATIONS OF ORGANIC MATTER.
FORMED MAINLY OF OSTRACODES AND ABUNDANT COSKINOLINA FLORIDANA. FEW DICTYOCONUS COOKEI.

320 - 344.5 AS ABOVE

SAME AS 302-315' BUT BECOMES MORE PUNKY AND FRIABLE WITH DEPTH AND CONTAINS MORE
CONCENTRATED ZONES OF ORGANICS.

344.5 TOTAL DEPTH