Executive Summary ROMP Site TR 17-3 Chloride Monitor and Core

Location - ROMP Site TR 17-3 is located approximately 0.2 miles southeast of the intersection of the U.S. 52 entrance to Timber Oaks and Ponderosa Avenue in Pasco County. The site is located in Section 11, Township 25 South, Range 16 East and at latitude 28°19'20", longitude 82°40'38".

Site Easement - The site was obtained from U.S. Home Corporation on February 28, 1978 for the sum of ten dollars. The Perpetual Easement is 20 feet by 20 feet and is contained in the Temporary Construction Easement which was 100 feet by 100 feet. The Temporary Easement was also obtained on February 28, 1978 for a period of 12 months which expired on February 27, 1979. These easements are recorded in O.R. Book 934, Pages 571 through 580 of Pasco County, Florida.

<u>Reason for Coring</u> - Core and water samples were obtained at this site in order to locate and define the 250 milligram per liter (mg/l) isochlor and the thickness of the freshwater-saltwater interface.

<u>Geology</u> - The site is located on the Pamlico Terrace at an elevation of approximately 20 feet above mean sea level (msl). The geology at this site was described from analysis of core samples that were obtained to a depth of 525 feet below land surface datum (LSD). The generalized geology of this site is as follows:

0-45' Sand and Clay

45'-295' Tampa and Suwannee Limestones

295'-455' Ocala Group

455'-525' Avon Park Limestone

<u>Hydrogeology</u> - The water levels at this site ranged from 25.01 to 25.97 feet below LSD. These water levels follow a cyclic rise and fall on a

daily and day to day basis which would indicate that they are influenced by the tides in the Gulf of Mexico.

<u>Core Drilling</u> - The coring of this site was completed under Contract R171 by McGregor Pump Company at a cost of \$8,056 or \$26.85 per foot.

Core samples of 3 inch diameter were obtained from 225 to 525 feet below LSD. These samples were described by the field geologist and boxed up to be sent to the Bureau of Geology for in-depth analysis. Upon completion of the coring operations the core hole was grouted with a neat cement slurry from 525 to 200 feet below LSD.

Well Construction - The monitor well was constructed by McGregor Pump Company under Contract R171 at a cost of \$6,801 or \$34.61 per foot. The well was constructed by using 53 feet of 14 inch steel work casing and 184 feet of 6 inch PVC. During construction it was necessary to set 20 feet of 12 inch PVC casing at a depth of 44 to 64 feet below LSD in order to seal off some loose material. Upon completion of grouting operations the well was drilled out to 196.5 feet below LSD and developed. Geophysical Logs - Caliper, gamma, and temperature logs were made on the core hole to a depth of 491 feet below LSD.

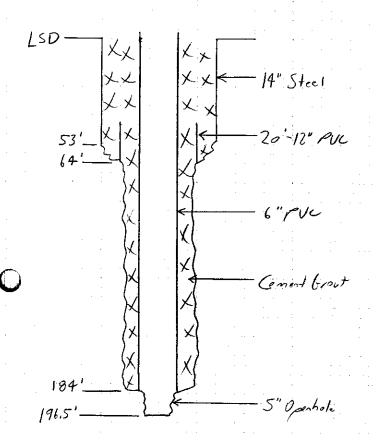
<u>Type of Monitor</u> - This well is designed to monitor the freshwater-saltwater interface at the 250 mg/l isochlor.

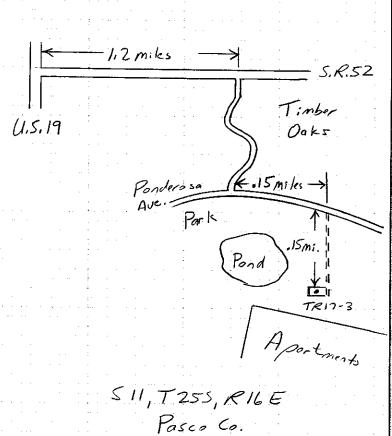
<u>Water Quality</u> - The potable water zone (less than 250 mg/l chlorides) extends down to around 195 feet below LSD at this site. The freshwater-saltwater interface was penetrated at this site and lies approximately between 195 and 415 feet below LSD. A total of 34 water samples were obtained at this site and analyzed for pH, alkalinity, hardness, calcium, magnesium, iron, conductivity, chlorides, sulfates, and color.

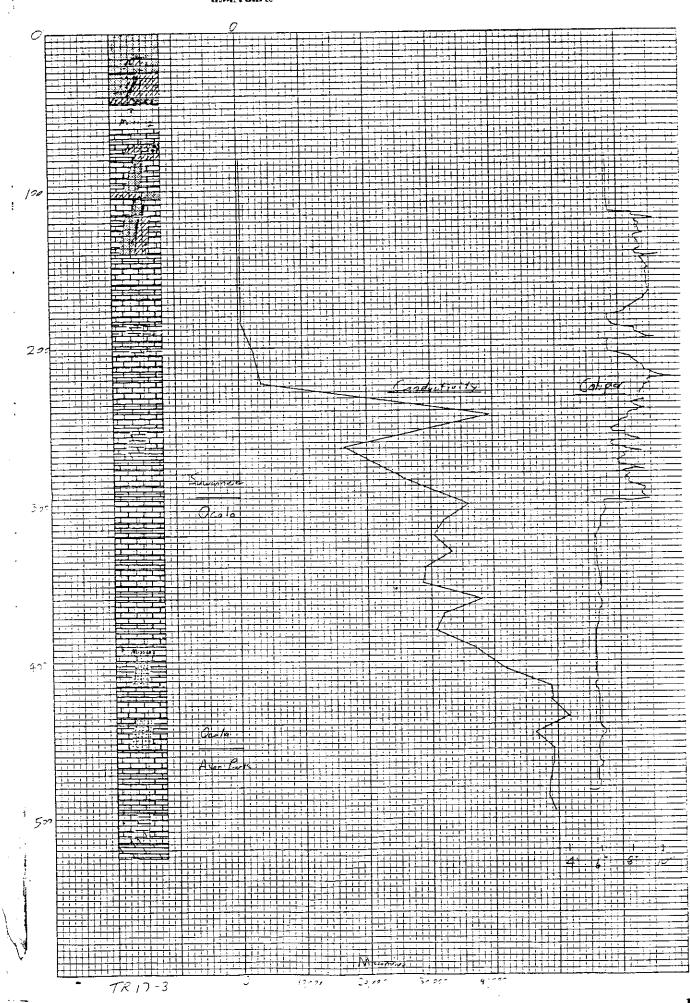
<u>USGS Notification</u> - SWFWMD Planning Section was notified on 5/15/79 that this well was completed.

As Built Well Diagram

Site Location







LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W- 14675 TOTAL DEPTH: 00525 FT.

SAMPLES - NONE

COUNTY - PASCO

LOCATION: T.25S R.16E S.11

LAT = N 28D 19M 20

LON = W 82D 40M 38

COMPLETION DATE - 10/24/78

ELEVATION - 020 FT

OTHER TYPES OF LOGS AVAILABLE - TEMP, GAMMA

OWNER/DRILLER: SWFWMD; MCGREGOR PUMP CO.; ROMP SITE TR 17-3.

WORKED BY: STRASSER; CODED AND ENTERED BY RICHARD GREEN 12/90 FROM A GEOLOGIST'S LOG PROVIDED BY SWFWMD; ROMP SITE TR 17-3 IS LOCATED APPROX. 0.2 MILES SOUTHEAST OF THE INTERSECTION OF US 52 ENTRANCE TO TIMBER OAKS AND PONDEROSA AVENUE IN PASCO COUNTY. CUTTINGS 0-300', 10' INTERVAL CORE SAMPLES 300-525'.

- 0. 45. UNDIFFERENTIATED SAND AND CLAY
- 60. 295. SUWANNEE LIMESTONE
- 295. 455. OCALA GROUP
- 455. -- AVON PARK FM.
- 0 5 SAND; CREAM; GRAIN SIZE: MEDIUM;
- 5 10 SAND; CREAM; GRAIN SIZE: MEDIUM: ACCESSORY MINERALS: SHELL-01%; MINOR COARSE GRAINS AND FINE SHELL FRAGMENTS.
- 10 15 AS ABOVE
- 15 20 SAND; ; RANGE: MEDIUM TO COARSE; ACCESSORY MINERALS: CLAY- %, SILT-%; WITH MINOR PURPLISH BROWN SILTY CLAY.
- 20 -25 SAND; CREAM; GRAIN SIZE: MEDIUM; ACCESSORY MINERALS: SHELL-01%; TRACE OF FINE SHELL FRAGMENTS.
- 25 -30 SAND; LIGHT GRAY TO CREAM; ACCESSORY MINERALS: CLAY-%; GRAYISH CREAM CLAY.
- 35 SAND;; 30 -AND SMALL LENSES OF COARSE, GRAY AND TAN CLAY.
- 35 40 AS ABOVE

- 40 45 NO SAMPLES
- 45 50 NO SAMPLES
- 50 55 NO SAMPLES
- 55 60 NO SAMPLES
- 60 65 LIMESTONE; WHITE TO CREAM;
 POOR INDURATION;
 OTHER FEATURES: CHALKY;
 FOSSILS: FOSSIL FRAGMENTS;
 FRIABLE, CRUMBLY, WEAKLY LITHIFIED IN ZONES.
- 65 70 LIMESTONE; WHITE TO CREAM; FRACTURE;
 POOR INDURATION;
 ACCESSORY MINERALS: CHERT- %;
 OTHER FEATURES: FOSSILIFEROUS;
 FRIABLE, WHITISH CHERT. FRACTURED TEXTURE.
- 70 75 LIMESTONE; TAN;

 MODERATE INDURATION;

 ACCESSORY MINERALS: CHERT- %;

 OTHER FEATURES: FOSSILIFEROUS;

 LITHIFIED, MINOR FOSSILS, SOME MINOR REDDISH/ORANGE CLAYEY MARLS.
- 75 80 LIMESTONE; WHITE TO LIGHT TAN;
 POOR INDURATION;
 ACCESSORY MINERALS: CHERT- %;
 FOSSILS: FOSSIL FRAGMENTS;
 FOSSILS AND SHELL FRAGMENTS, WHITISH GRAY CLAY.
- 80 85 LIMESTONE; WHITE TO CREAM;

 POOR INDURATION;

 ACCESSORY MINERALS: QUARTZ SAND- %, CHERT-%;

 MINOR SHELLS AND FOSSILS. FRIABLE.
- 85 90 LIMESTONE; ;
 SAME AS 80-85'. MINOR REDDISH\ORANGE STAINING.
- 90 95 AS ABOVE
- 95 100 AS ABOVE
- 100 105 AS ABOVE YELLOWISH CLAY, SAND, CHERT.
- 105 110 AS ABOVE SOMEWHAT FINER GRAINED.

- 110 115 AS ABOVE
- 115 120 LIMESTONE; CREAM TO WHITE;
 POOR INDURATION;
 ACCESSORY MINERALS: QUARTZ SAND- %, CLAY-%;
 FOSSILS AND SHELLS, MINOR SAND AND YELLOWISH CLAY OR MARL FRACTION, FRIABLE.
- 120 125 AS ABOVE
 SOME LT TAN CLAY WITH YELLOW/ORANGE MARL.
- 125 130 AS ABOVE
- 130 135 AS ABOVE
- 135 140 AS ABOVE

 LS CHANGED TO MORE TAN TO LT GRAY.
- 140 145 LIMESTONE; LIGHT TAN TO LIGHT GRAY; POSSIBLY HIGH PERMEABILITY;
 POOR INDURATION;
 OTHER FEATURES: FOSSILIFEROUS;
 FRIABLE, HIGH POROSITY AND PERMEABILITY.
- 145 150 AS ABOVE PACKED BIOMICRITE.
- 150 155 AS ABOVE
- 155 160 AS ABOVE
- 160 165 AS ABOVE
- 165 170 AS ABOVE
 LS- CLEAN GRADED INTO DIRTY GRAY. INTRA PACKED BIOMICRITE.
- 170 175 LIMESTONE; LIGHT GRAY TO LIGHT TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;
 POOR INDURATION;
 CEMENT TYPE(S): SPARRY CALCITE CEMENT;
 OTHER FEATURES: LOW RECRYSTALLIZATION, FOSSILIFEROUS;
 POORLY WASHED TO PACKED INTRA-BIOMICRITE, FRIABLE, HIGH MOLDIC POROSITY AND PERMEABILITY.
- 175 180 AS ABOVE
 FOSSILIFEROUS, MINOR LENSES OF ORGANICS IN LS.

- 110 115 AS ABOVE
- 115 120 LIMESTONE; CREAM TO WHITE;
 POOR INDURATION;
 ACCESSORY MINERALS: QUARTZ SAND- %, CLAY-%;
 FOSSILS AND SHELLS, MINOR SAND AND YELLOWISH CLAY OR MARL FRACTION, FRIABLE.
- 120 125 AS ABOVE
 SOME LT TAN CLAY WITH YELLOW/ORANGE MARL.
- 125 130 AS ABOVE
- 130 135 AS ABOVE
- 135 140 AS ABOVE
 LS CHANGED TO MORE TAN TO LT GRAY.
- 140 145 LIMESTONE; LIGHT TAN TO LIGHT GRAY; POSSIBLY HIGH PERMEABILITY;
 POOR INDURATION;
 OTHER FEATURES: FOSSILIFEROUS;
 FRIABLE, HIGH POROSITY AND PERMEABILITY.
- 145 150 AS ABOVE
 PACKED BIOMICRITE.
- 150 155 AS ABOVE
- 155 160 AS ABOVE
- 160 165 AS ABOVE
- 165 170 AS ABOVE
 LS- CLEAN GRADED INTO DIRTY GRAY. INTRA PACKED BIOMICRITE.
- 170 175 LIMESTONE; LIGHT GRAY TO LIGHT TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;
 POOR INDURATION;
 CEMENT TYPE(S): SPARRY CALCITE CEMENT;
 OTHER FEATURES: LOW RECRYSTALLIZATION, FOSSILIFEROUS;
 POORLY WASHED TO PACKED INTRA-BIOMICRITE, FRIABLE, HIGH MOLDIC POROSITY AND PERMEABILITY.
- 175 180 AS ABOVE
 FOSSILIFEROUS, MINOR LENSES OF ORGANICS IN LS.

180 - 185 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC; POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS;

POORLY WASHED TO PACKED BIOMICRITE, FRIABLE, HIGH MOLDIC POROSITY AND PERMEABILITY.

185 - 190 LIMESTONE; LIGHT TAN TO LIGHT BROWN; FRACTURE, MOLDIC, LOW PERMEABILITY; GOOD INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: DOLOMITIC;

MICRITE, WELL LITHIFIED, FRIABLE, MINOR MOLDIC POROSITY AND PERMEABILITY, MINOR FOSSILS.

190 - 195 LIMESTONE; LIGHT TAN TO CREAM; MOLDIC;

MODERATE INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS:

FOSSILIFEROUS MICRITE, WEAK-WELL LITHIFIED, ABUNDANT FOSSIL TESTS.

195 - 200 LIMESTONE; ;

SAME AS 185-190'. VERY FOSSILIFEROUS.

200 - 205 LIMESTONE; LIGHT BROWN TO LIGHT TAN; FRACTURE;

POOR INDURATION;

POORLY WASHED BIOSPARITE, FRIABLE, MINOR SHELL FRAGMENTS, MINOR AMOUNT OF DOLOMITE, LENSES OF HARD TO SOFT LS.

205 - 210 AS ABOVE

POORLY WASHED TO UNSORTED BIOSPARITE, INTERBEDDED W/ LENSES OF ORGANIC MATERIAL.

210 - 215 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT:

ACCESSORY MINERALS: ORGANICS- %;

OTHER FEATURES: FOSSILIFEROUS;

PACKED BIOMICRITE TO FOSSILIFEROUS MICRITE, FRIABLE, LENSES OF MODERATELY LITHIFIED LS, MINOR ORGANICS, HIGH MOLDIC POROSITY AND PERMEABILITY.

215 - 220 AS ABOVE

220 - 250 AS ABOVE

250 - 255 AS ABOVE

RECRYSTALLIZED LIMESTONE AND LENSES OF SOME DOLOMITIC LIMESTONE LIGHT BROWN TO BROWN.

255 - 260 AS ABOVE

260 - 265 AS ABOVE

265 - 270 AS ABOVE
MICRITE, VERY PASTY, LT GRAYISH TO TAN.

270 - 275 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC;
POOR INDURATION;
CEMENT TYPE(S): SPARRY CALCITE CEMENT;
PACKED BIOMICRITE, HIGH MOLDIC POROSITY AND PERMEABILITY; FRIABLE

275 - 280 LIMESTONE; ; SAME AS ABOVE.

280 - 285 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC;
POOR INDURATION;
CEMENT TYPE(S): SPARRY CALCITE CEMENT;
FOSSILS: FOSSIL FRAGMENTS;
PACKED BIOMICRITE, FRIABLE, HIGH MOLDIC POROSITY AND PERM., SHELL FOSSIL FRAGMENTS, VERY CLEAN.

285 - 295 AS ABOVE

295 - 300 AS ABOVE

VERY FOSSILIFEROUS, HIGH MOLDIC POROSITY AND PERMEABILITY.

300 - 302.5 NO SAMPLES

302.5- 310 LIMESTONE; LIGHT TAN TO CREAM; MOLDIC;
POOR INDURATION;
CEMENT TYPE(S): SPARRY CALCITE CEMENT;
SPARSE BIOMICRITE, FRIABLE, EARTHY. FOSSILIFEROUS, LENSES OF VERY FOSSILIFEROUS
MICRITE TO LENSES OF PACKED BIOMICRITE.

310 - 385 AS ABOVE

- 390 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC;
MODERATE INDURATION;
CEMENT TYPE(S): SPARRY CALCITE CEMENT;
OTHER FEATURES: FOSSILIFEROUS;
POORLY WASHED BIOSPARITE, FRIABLE, FOSSILIFEROUS, LENSES OF PASTY MICRITE, HIGH
MOLDIC POROSITY AND PERM., WEAK-GOOD LITHIFICATION.

390 - 395 NO SAMPLES
LOST DUE TO CAVITY OR VERY SOFT FORMATION.

395 - 398 LIMESTONE; ; SAME AS 385-390'.

398 - 405 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC; POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

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

OTHER FEATURES: FOSSILIFEROUS, COQUINA;

POORLY WASHED BIOSPARITE, FOSSIL HASH, HIGH MOLDIC POROSITY AND PERM., BURROWS,

MINOR SAND AND LENSES OF PASTY MICRITE.

405 - 415 AS ABOVE

415 - 421 LIMESTONE; LIGHT TAN TO CREAM; MOLDIC:

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS:

SPARSE BIOMICRITE TO FOSSILIFEROUS BIOMICRITE, POORLY LITHIFIED WITH ZONES OF

PASTY MICRITE, MINOR MOLDIC POROSITY AND PERMEABILITY.

421 - 425 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;

GOOD INDURATION;

OTHER FEATURES: DOLOMITIC;

UNSORTED TO POORLY WASHED BIOSPARITE, HIGH MOLDIC POROSITY AND PERM., SOME

DOLOMITIZATION IN BURROWS.

425 - 435 LIMESTONE; TAN TO BROWN; MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS;

POORLY WASHED BIOSPARITE, FRIABLE, FOSSIL HASH, MEDIUM MOLDIC POROSITY AND

PERMEABILITY, MINOR PASTY ZONES OF MICRITE.

435 - 445 AS ABOVE

LT TAN-TAN, MINOR SAND FRACTION, WEAKLY LITHIFIED.

445 - 455 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;

POOR INDURATION:

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

ACCESSORY MINERALS: QUARTZ SAND- %;

OTHER FEATURES: FOSSILIFEROUS;

PACKED BIOMICRITE TO POORLY WASHED BIOSPARITE, EARTHY, FRIABLE, HIGH MOLDIC

POROSITY AND PERM., MINOR SAND FRACTION, BECOMING VERY PASTY MICRITE W/ DEPTH.

POOR-WEAKLY LITHIFIED.

455 - 465 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS;

PACKED BIOMICRITE TO POORLY WASHED BIOSPARITE, FRIABLE, HIGH MOLDIC POROSITY AND

PERM., FOSSIL HASH, WEAK-POORLY LITHIFIED.

398 - 405 LIMESTONE; LIGHT TAN TO CREAM; POSSIBLY HIGH PERMEABILITY, MOLDIC; POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

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

OTHER FEATURES: FOSSILIFEROUS, COQUINA;

POORLY WASHED BIOSPARITE, FOSSIL HASH, HIGH MOLDIC POROSITY AND PERM., BURROWS,

MINOR SAND AND LENSES OF PASTY MICRITE.

- 405 415 AS ABOVE
- 415 421 LIMESTONE; LIGHT TAN TO CREAM; MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS;

SPARSE BIOMICRITE TO FOSSILIFEROUS BIOMICRITE, POORLY LITHIFIED WITH ZONES OF

PASTY MICRITE, MINOR MOLDIC POROSITY AND PERMEABILITY.

421 - 425 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC:

GOOD INDURATION;

OTHER FEATURES: DOLOMITIC:

UNSORTED TO POORLY WASHED BIOSPARITE, HIGH MOLDIC POROSITY AND PERM., SOME

DOLOMITIZATION IN BURROWS.

425 - 435 LIMESTONE; TAN TO BROWN; MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS;

POORLY WASHED BIOSPARITE, FRIABLE, FOSSIL HASH, MEDIUM MOLDIC POROSITY AND

PERMEABILITY, MINOR PASTY ZONES OF MICRITE.

435 - 445 AS ABOVE

LT TAN-TAN, MINOR SAND FRACTION, WEAKLY LITHIFIED.

445 - 455 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

ACCESSORY MINERALS: QUARTZ SAND- %;

OTHER FEATURES: FOSSILIFEROUS;

PACKED BIOMICRITE TO POORLY WASHED BIOSPARITE, EARTHY, FRIABLE, HIGH MOLDIC

POROSITY AND PERM., MINOR SAND FRACTION, BECOMING VERY PASTY MICRITE W/ DEPTH.

POOR-WEAKLY LITHIFIED.

455 - 465 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;

POOR INDURATION;

CEMENT TYPE(S): SPARRY CALCITE CEMENT;

OTHER FEATURES: FOSSILIFEROUS;

PACKED BIOMICRITE TO POORLY WASHED BIOSPARITE, FRIABLE, HIGH MOLDIC POROSITY AND

PERM., FOSSIL HASH, WEAK-POORLY LITHIFIED.

- 465 470 AS ABOVE
- 470 472 LIMESTONE; TAN TO BROWN;
 ARGILLACEOUS MICRITE, PASTY, LENSES OF ORGANICS, FRIABLE, FOSSILIFEROUS.
- 472 476 LIMESTONE;; SAME AS 455-465'.
- 476 483 LIMESTONE; LIGHT TAN TO TAN; POSSIBLY HIGH PERMEABILITY, MOLDIC;
 POOR INDURATION;
 CEMENT TYPE(S): SPARRY CALCITE CEMENT;
 OTHER FEATURES: FOSSILIFEROUS;
 PACKED TO POORLY WASHED BIOSPARITE, FRIABLE, HIGH MOLDIC POROSITY AND PERMEABILITY, FOSSILIFEROUS.
- 483 485 LIMESTONE; ;

 SAME AS 472-475'. MINOR LENSES AT ABOUT 483-484' OF GRAY MICRITE, SOMEWHAT ORGANIC WITH LENSES.
- 485 495 AS ABOVE

 BECOMING SOMEWHAT PASTY WITH DEPTH. ENCOUNTERED VOIDS OF ABOUT 2-4' THICK, MAY

 HAVE LOST SOME CORE.
- 495 505 LIMESTONE; LIGHT TAN TO BROWN; POSSIBLY HIGH PERMEABILITY, MOLDIC;
 GOOD INDURATION;
 ACCESSORY MINERALS: ORGANICS- %;
 OTHER FEATURES: DOLOMITIC, FOSSILIFEROUS;
 POORLY WASHED BIOSPARITE, LENSE OF SOME DOLOMITIZATION, HIGH MOLDIC POROSITY AND PERM., LENSES OF PASTY MICRITE THROUGHOUT SECTION, MINOR ORGANICS (LIGNITE?).
- 505 515 LIMESTONE;;

 LARGE CAVITY ZONE. TWO CAVITIES EACH ABOUT 2-4' THICK WITH LENSES IN BETWEEN.

 WASHING WATER WAS DARK GRAY COLORED LIME OR MICRITE, VERY FOSSILIFEROUS,

 CONTAINING BLACK LIGNITE PARTICLES WITH SOME DOLOMITE WHICH WAS LIGHT GRAY.

 RECOVERED ONE BAG OF SAMPLE.
- 515 525 DOLOSTONE; BROWN; FRACTURE, POSSIBLY HIGH PERMEABILITY, MOLDIC;
 GOOD INDURATION;
 HARD DOLOMITE, LENSES OF HIGH MOLDIC POROSITY AND PERM., SOME ORGANICS
 (LIGNITE), DOLOMITIC REPLACEMENT OF FOSSILS, LENSES OF HARD TO MODERATELY HARD DOLOMITE.
- 525 TOTAL DEPTH

LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W- 14675 TOTAL DEPTH: 00525 FT.

SAMPLES - NONE

COUNTY - PASCO

LOCATION: T.25S R.16E S.11

LAT = N 28D 19M 20

LON = W 82D 40M 38

COMPLETION DATE - 10/24/78

OTHER TYPES OF LOGS AVAILABLE - NONE

ELEVATION - 020 FT

OWNER/DRILLER: SWFWMD; MCGREGGOR PUMP CO.; ROMP SITE TR 17-3.

WORKED BY: CODED AND ENTERED BY RICHARD GREEN (CUTTINGS DESCRIPTIONS) AND T.L. SEAL (CORE DESCRIPTIONS). ROMP SITE TR 17-3 IS LOCATED APPROX. 0.2 MILES SOUTHEAST OF THE INTERSECTION OF US 52 ENTRANCE TO TIMBER OAKS AND PONDEROSA AVENUE IN PASCO COUNTY. CUTTINGS 0-300', 10' INTERVAL CORE SAMPLES 300-525'.

- 0. 40. UNDIFFERENTIATED SAND AND CLAY
- 40. 60. NO SAMPLES
- 60. 275. SUWANNEE LIMESTONE
- 275. 410. OCALA GROUP
- . AVON PARK FM. 410. -
- 5 SAND; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY; GRAIN SIZE: FINE; RANGE: MEDIUM TO FINE; ROUNDNESS: ROUNDED TO SUB-ANGULAR; MEDIUM SPHERICITY; UNCONSOLIDATED;
- 5 10 SAND; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY; GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM; ROUNDNESS: ROUNDED TO SUB-ANGULAR; MEDIUM SPHERICITY; UNCONSOLIDATED; ACCESSORY MINERALS: SHELL-01%;
- 10 15 SAND; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY; GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM; ROUNDNESS: ROUNDED TO SUB-ANGULAR; MEDIUM SPHERICITY; UNCONSOLIDATED;
- 15 -20 AS ABOVE
- 20 -25 AS ABOVE MINOR PIECES OF CARBONATE-CEMENTED SAND WITH TRACE PHOSPHATE
- 30 SAND; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY; GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; UNCONSOLIDATED;
- 30 35 SAND; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY; GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; UNCONSOLIDATED; ACCESSORY MINERALS: IRON STAIN-01%;

- 35 40 SAND; VERY LIGHT ORANGE TO LIGHT BROWN; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY; GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; POOR INDURATION; CEMENT TYPE(S): CLAY MATRIX; ACCESSORY MINERALS: IRON STAIN- %, SHELL-01%;
- 40 60 NO SAMPLES
- 60 65 LIMESTONE; WHITE; INTERGRANULAR, LOW PERMEABILITY;
 GRAIN TYPE: BIOGENIC, CALCILUTITE;
 GOOD INDURATION;
 CONTAINS PIECES OF GRAY, SANDY, PHOSPHATIC (VERY FINE) CARBONATE
- 65 70 LIMESTONE; WHITE TO VERY LIGHT ORANGE; INTERGRANULAR, LOW PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
 MODERATE INDURATION;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION;
 FOSSILS: ECHINOID, BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS;
- 70 75 LIMESTONE; VERY LIGHT ORANGE; INTERGRANULAR, LOW PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
 MODERATE INDURATION;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION;
 FOSSILS: ECHINOID, FOSSIL FRAGMENTS;
- 75 80 AS ABOVE SOME PALE YELLOWISH-BROWN CLAY FRAGMENTS
- 80 85 LIMESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
 MODERATE INDURATION;
 FOSSILS: BRYOZOA, MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID;
- 85 90 AS ABOVE
- 90 95 AS ABOVE
- 95 100 LIMESTONE; WHITE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
 POOR INDURATION;
 FOSSILS: ECHINOID, FOSSIL FRAGMENTS, MOLLUSKS;
- 100 105 LIMESTONE; WHITE TO VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL;
 GRAIN SIZE: COARSE; RANGE: MEDIUM TO COARSE; POOR INDURATION;
 FOSSILS: ECHINOID, BRYOZOA;
 LOOKS LIKE A GRAINSTONE DISAGGREGATED BY DRILLING
- 105 110 AS ABOVE

110 - 115 AS ABOVE

115 - 120 LIMESTONE; WHITE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 70% ALLOCHEMICAL CONSTITUENTS;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
OTHER FEATURES: MEDIUM RECRYSTALLIZATION, LOW RECRYSTALLIZATION;
FOSSILS: ECHINOID, BRYOZOA;

120 - 125 AS ABOVE

125 - 130 LIMESTONE; WHITE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 65% ALLOCHEMICAL CONSTITUENTS;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
ACCESSORY MINERALS: SPAR- %;
OTHER FEATURES: MEDIUM RECRYSTALLIZATION;
FOSSILS: BENTHIC FORAMINIFERA, ECHINOID;
SORITES FRAGMENT NOTED

- 130 135 LIMESTONE; WHITE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 70% ALLOCHEMICAL CONSTITUENTS;
 MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR-01%;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION;
 FOSSILS: ECHINOID, BRYOZOA;
- 135 140 LIMESTONE; WHITE TO VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 60% ALLOCHEMICAL CONSTITUENTS;
 MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR-01%;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION;
 FOSSILS: ECHINOID, BRYOZOA, CORAL;
- 140 145 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 90% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION, GRANULAR, DOLOMITIC;
 FOSSILS: BENTHIC FORAMINIFERA, ALGAE;
 PACKSTONE; MINOR CAVINGS POSSIBLY DOLOMITIC
- 145 150 AS ABOVE

- 150 155 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 80% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION, GRANULAR, DOLOMITIC;
 FOSSILS: ECHINOID, BENTHIC FORAMINIFERA;
- 155 160 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION, HIGH RECRYSTALLIZATION, GRANULAR, DOLOMITIC;
 FOSSILS: BENTHIC FORAMINIFERA, MILIOLIDS;
- 160 165 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: DOLOMITIC, MEDIUM RECRYSTALLIZATION, GRANULAR;
 FOSSILS: BRYOZOA, BENTHIC FORAMINIFERA, MOLLUSKS, MILIOLIDS;
- 165 170 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 95% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: HIGH RECRYSTALLIZATION, DOLOMITIC, GRANULAR;
 FOSSILS: CONES, BENTHIC FORAMINIFERA;
 VERY FINE SPAR COATS MOST SURFACES; DOLOMITIC; GRAINSTONE; DICTYOCONUS AMERICANUS NOTED
- 170 175 AS ABOVE
- 175 180 AS ABOVE
- 180 185 AS ABOVE
 SLIGHTLY MOLDIC AND LESS RECRYSTALLIZED THAN ABOVE
- 185 190 DOLOSTONE; GRAYISH BROWN TO LIGHT OLIVE GRAY; LOW PERMEABILITY;
 50-90% ALTERED; SUBHEDRAL;
 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
 OTHER FEATURES: SUCROSIC;
- 190 195 AS ABOVE
 ABUNDANT CAVINGS
- 195 200 AS ABOVE LESS CAVINGS

- 150 155 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 80% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION, GRANULAR, DOLOMITIC;
 FOSSILS: ECHINOID, BENTHIC FORAMINIFERA;
- 155 160 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: MEDIUM RECRYSTALLIZATION, HIGH RECRYSTALLIZATION, GRANULAR, DOLOMITIC;
 FOSSILS: BENTHIC FORAMINIFERA, MILIOLIDS;
- 160 165 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: DOLOMITIC, MEDIUM RECRYSTALLIZATION, GRANULAR;
 FOSSILS: BRYOZOA, BENTHIC FORAMINIFERA, MOLLUSKS, MILIOLIDS;
- 165 170 LIMESTONE; VERY LIGHT GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 95% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: HIGH RECRYSTALLIZATION, DOLOMITIC, GRANULAR;
 FOSSILS: CONES, BENTHIC FORAMINIFERA;
 VERY FINE SPAR COATS MOST SURFACES; DOLOMITIC; GRAINSTONE; DICTYOCONUS AMERICANUS NOTED
- 170 175 AS ABOVE
- 175 180 AS ABOVE
- 180 185 AS ABOVE
 SLIGHTLY MOLDIC AND LESS RECRYSTALLIZED THAN ABOVE
- 185 190 DOLOSTONE; GRAYISH BROWN TO LIGHT OLIVE GRAY; LOW PERMEABILITY;
 50-90% ALTERED; SUBHEDRAL;
 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
 OTHER FEATURES: SUCROSIC;
- 190 195 AS ABOVE
 ABUNDANT CAVINGS
- 195 200 AS ABOVE LESS CAVINGS

- 200 205 DOLOSTONE; GRAYISH BROWN; POSSIBLY HIGH PERMEABILITY, PIN POINT VUGS;
 50-90% ALTERED; SUBHEDRAL;
 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
 CEMENT TYPE(S): DOLOMITE CEMENT;
 OTHER FEATURES: SUCROSIC;
- 205 210 DOLOSTONE; GRAYISH BROWN; POSSIBLY HIGH PERMEABILITY, LOW PERMEABILITY;
 10-50% ALTERED; SUBHEDRAL;
 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
 CEMENT TYPE(S): DOLOMITE CEMENT;
 SEDIMENTARY STRUCTURES: LAMINATED,
 ACCESSORY MINERALS: ORGANICS- %;
 OTHER FEATURES: SUCROSIC, CALCAREOUS;
 LAMINATED WITH ORGANICS
- 210 215 LIMESTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 75% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: DOLOMITIC, GRANULAR;
 FOSSILS: ECHINOID, BENTHIC FORAMINIFERA, CONES;
- 215 220 AS ABOVE
- 220 225 AS ABOVE
 MINOR CAVINGS
- 225 230 AS ABOVE
- 230 235 LIMESTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 80% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: DOLOMITIC, GRANULAR;
 FOSSILS: ECHINOID, MOLLUSKS, CONES, BENTHIC FORAMINIFERA;
- 235 240 LIMESTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY, INTERCRYSTALLINE;
 GRAIN TYPE: BIOGENIC, CRYSTALS, BIOGENIC; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: COARSE TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: GRANULAR, HIGH RECRYSTALLIZATION;
 FOSSILS: BENTHIC FORAMINIFERA;
- 240 245 AS ABOVE
 SLIGHTLY LESS RECRYSTALLIZED, MINOR CAVINGS

- 245 250 LIMESTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO FINE; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 ACCESSORY MINERALS: SPAR- %;
 OTHER FEATURES: GRANULAR, MEDIUM RECRYSTALLIZATION;
 FOSSILS: BENTHIC FORAMINIFERA, CONES;
 PACKSTONE; DOLOMITIC?
- 250 255 DOLOSTONE; GRAYISH BROWN; LOW PERMEABILITY, PIN POINT VUGS; 50-90% ALTERED; SUBHEDRAL;
 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION; CEMENT TYPE(S): DOLOMITE CEMENT;
 OTHER FEATURES: SUCROSIC;
- 255 260 DOLOSTONE; GRAYISH BROWN TO DARK YELLOWISH BROWN; POSSIBLY HIGH PERMEABILITY, PIN POINT VUGS; 50-90% ALTERED; SUBHEDRAL;

 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION; CEMENT TYPE(S): DOLOMITE CEMENT;

 OTHER FEATURES: SUCROSIC;

 MORE POROUS THAN ABOVE: ABUNDANT CAVINGS
- 260 265 AS ABOVE
- 265 270 LIMESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 95% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
 OTHER FEATURES: GRANULAR;
 MINOR CAVINGS; PACKSTONE; GRAINSTONE
- 270 275 AS ABOVE
 WITHOUT CAVINGS
- 275 280 LIMESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 95% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
 OTHER FEATURES: GRANULAR;
 FOSSILS: BRYOZOA, BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS;
- 280 285 LIMESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
 GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;
 GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
 CEMENT TYPE(S): CALCILUTITE MATRIX;
 OTHER FEATURES: GRANULAR;
 PACKSTONE
- 285 290 AS ABOVE

290 - 295 LIMESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE; 85% ALLOCHEMICAL CONSTITUENTS;

GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: GRANULAR;

FOSSILS: BRYOZOA, BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, MOLLUSKS, ECHINOID;

295 - 300 AS ABOVE

300 - 302.5 NO SAMPLES

CUTTINGS DESCRIBED BY R. GREEN, 0-300'

302.5- 305 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; INTERGRANULAR;

GRAIN TYPE: CRYSTALS, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;

OTHER FEATURES: MEDIUM RECRYSTALLIZATION:

FOSSILS: BRYOZOA, BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS;

FINE-GRAINED WACKESTONE TO PACKSTONE; FEW RECOGNIZABLE FOSSIL FRAGMENTS

305 - 306 PACKSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY,

INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

FOSSILS: BRYOZOA, BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS;

EXTREMELY WELL-PRESERVED OCALA FOSSIL ASSEMBLAGE: LEPIDOCYCLINA OCALANA; INTACT

GASTROPODS

306 - 310 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: CALCILUTITE, SKELETAL:

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY;

FOSSILS: FOSSIL MOLDS, FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA;

FINE-GRAINED WACKESTONE; REMAINING FOSSIL FRAGMENTS COMPLETELY RECRYSTALLIZED; GRADES TO A

PACKSTONE

310 - 315 WACKESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, MOLLUSKS;

LEPIDOCYCLINA OCALANA ABUNDANT; THROUGHOUT THE INTERVAL 302-350, ORIGINAL "MUD" APPEARS TO

BE STRONGLY BIOTURBATED; NO OBSERVABLE BEDDING

315 - 319 AS ABOVE

65% RECOVERY; LEPIDOCYCLINA ABUNDANT; LARGE MOLLUSK SHELL FRAGMENTS

319 - 327 WACKESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS:

GRADES INTO PACKSTONE; FOSSIL FRAGMENTS COMPLETELY RECRYSTALLIZED; 50% RECOVERY

327 - 332 WACKESTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY, MOLDIC;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY;

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, BRYOZOA, FOSSIL FRAGMENTS;

INTRAGRANULAR POROSITY ALSO MODERATELY DEVELOPED IN SOME INTERVALS

332 - 340 PACKSTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY, INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY:

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

340 - 342.5 AS ABOVE

342.5- 345 PACKSTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY, INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE:

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, FOSSIL MOLDS, ALGAE;

SOME INTERVALS COMPOSED ALMOST ENTIRELY OF FOSSIL FRAGMENTS - A "FOSSIL HASH": A FEW LARGE

MOLLUSK MOLDS

345 - 350 PACKSTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY:

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, MOLLUSKS, FOSSIL MOLDS;

50% RECOVERY; MUCH FEWER FOSSIL FRAGMENTS THAN ABOVE INTERVAL

350 - 352.5 AS ABOVE

0% RECOVERY

352.5- 360 PACKSTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

OTHER FEATURES: CHALKY:

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, MILIOLIDS, MOLLUSKS, FOSSIL MOLDS;

360 - 365

LEPIDOCYCLINA OCALANA UP TO 1.5 CM IN DIAMETER; LARGE INTERNAL MOLDS OF MOLLUSKS, CREATED

BY SMALL FORAMS

365 - 370 PACKSTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX:

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, MILIOLIDS, MOLLUSKS, FOSSIL MOLDS;

370 - 380 NO SAMPLES

380 - 390 PACKSTONE; VERY LIGHT ORANGE; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY, INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, FOSSIL MOLDS, MOLLUSKS, MILIOLIDS;

LARGE GASTROPOD MOLDS AND LARGE LEPIDOCYCLINA OCALANA; SOME MOLDIC POROSITY IN SOME

INTERVALS

390 - 400 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY,

INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, FOSSIL MOLDS, MOLLUSKS;

SAME COMMENT AS 380-390 INTERVAL; SOME SECTIONS MAY BE CALLED GRAINSTONE

400 - 410 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY,

INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, FOSSIL MOLDS, MOLLUSKS, BRYOZOA;

GOOD EXAMPLE OF ENCRUSTING BRYOZOANS; NUMEROUS INTERNAL MOLDS OF MOLLUSKS FILLED WITH

SMALL FORAMS

410 - 420 AS ABOVE

SOME EXTERNAL MOLLUSK MOLDS; SOME ZONES EXHIBIT MODERATE AMOUNTS OF RECRYSTALLIZATION

GAMMA LOG SUGGESTS TOP OF AVON PARK FORMATION AT 410'.

420 - 425 PACKSTONE; YELLOWISH GRAY TO YELLOWISH GRAY; INTERGRANULAR, MOLDIC,

POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

ACCESSORY MINERALS: DOLOMITE- %;

OTHER FEATURES: MEDIUM RECRYSTALLIZATION;

FOSSILS: MOLLUSKS, FOSSIL MOLDS, BENTHIC FORAMINIFERA;

425 - 435 PACKSTONE; YELLOWISH GRAY TO YELLOWISH GRAY; INTERGRANULAR, MOLDIC,

POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

ACCESSORY MINERALS: DOLOMITE- %:

OTHER FEATURES: MEDIUM RECRYSTALLIZATION;

FOSSILS: MOLLUSKS, FOSSIL MOLDS, BENTHIC FORAMINIFERA;

FEWER LARGE INTACT FOSSIL MOLDS; OVERALL MUCH FINER GRAIN SIZE (DUE TO EXTENSIVE

BIOTURBATION?); TRACE DOLOMITE

435 - 446.5 PACKSTONE; YELLOWISH GRAY TO YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

ACCESSORY MINERALS: DOLOMITE- %, SPAR- %;

OTHER FEATURES: MEDIUM RECRYSTALLIZATION;

FOSSILS: MOLLUSKS, FOSSIL MOLDS, BENTHIC FORAMINIFERA;

DOLOMITE IDENTIFICATION IS TENTATIVE, MOLDIC POROSITY NOT AS WELL DEVELOPED IN THIS

INTERVAL

446.5- 455 PACKSTONE; YELLOWISH GRAY TO YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY,

MOLDIC:

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX;

ACCESSORY MINERALS: SPAR- %;

OTHER FEATURES: MEDIUM RECRYSTALLIZATION;

455 - 465 PACKSTONE; YELLOWISH GRAY TO YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY,

INTRAGRANULAR;

GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;

MODERATE INDURATION:

CEMENT TYPE(S): CALCILUTITE MATRIX;

ACCESSORY MINERALS: SPAR- %;

OTHER FEATURES: DOLOMITIC;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS, FOSSIL FRAGMENTS, BRYOZOA;

GRADES FROM PACKSTONE TO GRAINSTONE

....

465 - 475 AS ABOVE

TRACE ORGANICS AND WELL-PRESERVED BURROWS IN DOLO-MUDSTONE; CHARACTERISTIC AVON PARK ASSOCIATION, STILL CALCITE-RICH

475 - 477 PACKSTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, CALCILUTITE;

MODERATE INDURATION;

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

OTHER FEATURES: DOLOMITIC;

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, FOSSIL MOLDS, MOLLUSKS, BRYOZOA;

GRADES TO PACKSTONE IN SOME INTERVALS

477 - 485 AS ABOVE

60% RECOVERY

485 - 495 NO SAMPLES

495 - 500 PACKSTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

MODERATE INDURATION;

CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT:

OTHER FEATURES: DOLOMITIC:

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS;

GRADES TO PACKSTONE IN SOME INTERVALS; 70% RECOVERY; RECOVERED MATERIAL APPEARS MORE

EQUIGRANULAR, POSSIBLY DUE TO BIOTURBATION

500 - 505 WACKESTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

MODERATE INDURATION:

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

OTHER FEATURES: DOLONITIC:

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS;

505 - 515 LIMESTONE; YELLOWISH GRAY; INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;

GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;

UNCONSOLIDATED:

CEMENT TYPE(S): CALCILUTITE MATRIX;

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS, MOLLUSKS;

CUTTINGS BAG WAS ALL THAT WAS RECOVERED, DISAGGREGATED BY DRILLING

515 - 525 DOLOSTONE; DARK YELLOWISH BROWN TO GRAYISH BROWN; INTERGRANULAR, FRACTURE;

50-90% ALTERED; ANHEDRAL;

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;

CEMENT TYPE(S): DOLOMITE CEMENT;

FOSSILS: ORGANICS;

10% RECOVERY; NOTABLY DIFFERENT LITHOLOGY; TRUE DOLOSTONE - FINE GRAINED WITH

WELL-DEVELOPED SECONDARY POROSITY; BAGS OF CUTTINGS ALSO IN CORE BOX

525 TOTAL DEPTH