

LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W-17791
TOTAL DEPTH: 163 FT.
6
SAMPLES - NONE
51S

COUNTY - DADE99
LOCATION: T.53S R.39E S.

LAT = 25D 51M

LON = 80D 29M

06S

COMPLETION DATE: 25/06/96

ELEVATION: 5 FT

OTHER TYPES OF LOGS AVAILABLE - NONE

OWNER/DRILLER:SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WORKED BY:CINDY FISCHLER. COMPLETED OCTOBER 1999. 025-17 DLBS-6
SFWMD GEOPHY # 025000020 HIALEAH S.W. FLA. PLANAR X 669370
STATE COORD. Y 556629 ACTUAL CORE FOOTAGE IS LESS THAN INTERVAL GIVEN.

0. - 163 . 121PCPC PLIOCENE-PLEISTOCENE

0 - 2 LIMESTONE; YELLOWISH GRAY
10% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: FINE TO GRAVEL; POOR

INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: CALCILUTITE-60%, SHELL-15%
ORGANICS- 5%
FOSSILS: CORAL
MANY FRESHWATER GASTROPODS. POORLY INDURATED CALCAREOUS

MUD

WITH ORGANICS AND PIECES OF CORAL AND LIMESTONE.

2 - 4 SILT; YELLOWISH GRAY
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: SHELL-15%, ORGANICS-30%
OTHER FEATURES: CALCAREOUS
FOSSILS: PLANT REMAINS
MANY FRESHWATER GASTROPODS. CALCAREOUS, PEATY SILT.

4 - 12 LIMESTONE; YELLOWISH GRAY TO DARK YELLOWISH ORANGE
8% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-20%, SILT-30%, SHELL-10%
QUARTZ SAND-15%
OTHER FEATURES: CALCAREOUS, MEDIUM RECRYSTALLIZATION
FOSSILS: PLANT REMAINS
FRESHWATER GASTROPODS. SOME IRON STAINING. CALCAREOUS

PEATY SILT POORLY INDURATED AS ABOVE AND A SANDY CRYSTALLINE LIMESTONE. SILT DECREASES WITH DEPTH TO <5%. POROSITY INCREASES WITH DEPTH. MEDIUM TO HIGH RECRYSTALLIZATION.

- 12 - 15 WACKESTONE; YELLOWISH GRAY TO WHITE
10% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-15%, QUARTZ SAND-10%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
MANY RECRYSTALLIZED GASTROPODS. SOME PARTS ARE VERY SANDY WHILE OTHERS HAVE LITTLE OR NO SAND. LUMPY DRUSY CALCITE COATS SOME PIECES.
- 15 - 20 PACKSTONE; YELLOWISH GRAY TO WHITE
20% POROSITY: INTERGRANULAR, VUGULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, PELLET, CRYSTALS
75% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-15%, SHELL-10%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: WORM TRACES, MOLLUSKS
PACKSTONE TO WACKESTONE. LUMPY DRUSY CALCITE OVER SOME PIECES. MOST OF THE SHELLS HAVE DISSOLVED OR RECRYSTALLIZED.
- 20 - 26 WACKESTONE; YELLOWISH GRAY TO LIGHT GRAY
15% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
GOOD INDURATION
CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND- 3%, SPAR-15%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
HIGHLY MOLDIC CLAMS AND GASTROPODS. 24-26FT. IS MOTTLED.
- 26 - 28 LIMESTONE; WHITE TO LIGHT GRAY
20% POROSITY: INTERGRANULAR, VUGULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: SPAR-15%
OTHER FEATURES: LOW RECRYSTALLIZATION

FOSSILS: BENTHIC FORAMINIFERA
MOLDIC WHITE LIMESTONE MOTTLED WITH A MORE INDURATED GRAY
LIMESTONE. LOW TO MEDIUM RECRYSTALLIZATION. VERY FINELY
GROUND SHELL FRAGMENTS IN THE WHITE LIMESTONE.

28 - 37 LIMESTONE; WHITE
20% POROSITY: INTERGRANULAR, VUGULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-10%, QUARTZ SAND- 3%, SHELL- 3%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, BRYOZOA
MOLDIC WACKSTONE WITH AREAS OF POORLY INDURATED CHALKY
LIMESTONE AND A HIGHLY MOLDIC LIMESTONE
(PACKSTONE-WACKSTONE) WITH SOME SAND AND MORE
CRYSTALLIZATION. LARGE SOLUTION VOIDS PROBABLY FROM
BRYOZOAN. 35-37FT. INTERVAL IS FRAGMENTED INTO SMALL
PIECES.

37 - 40 WACKSTONE; WHITE
20% POROSITY: INTERGRANULAR, VUGULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-15%, QUARTZ SAND- 2%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
ABUNDANT GASTROPOD MOLDS. MANY OF THE ALLOCHEMS ARE
RECRYSTALLIZED. SOLUTION VOIDS ARE PRESENT. SOME
CALCAREOUS
SANDY POCKETS PRESENT.

40 - 43 LIMESTONE; WHITE TO YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
75% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-15%, QUARTZ SAND-40%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
GASTROPOD MOLDS. SANDY, MOLDIC LIMESTONE WITH VARYING
AMOUNTS OF RECRYSTALLIZATION. DRUSY CALCITE.

43 - 45 LIMESTONE; YELLOWISH GRAY TO WHITE
10% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
75% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-25%, QUARTZ SAND-25%, SHELL-<2%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BRYOZOA
SAMPLE IS FRAGMENTED INTO SMALL PIECES. MEDIUM TO HIGH
RECRYSTALLIZATION.

45 - 50 LIMESTONE; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-20%, QUARTZ SAND-30%, SHELL-25%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
MICROCOQUINA. SANDY SHELLY LIMESTONE, SHELL IS VERY
FINELY
GROUND.

50 - 53 WACKESTONE; YELLOWISH GRAY
10% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-25%, QUARTZ SAND-15%, SHELL-20%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
MOLDIC, SANDY LIMESTONE WITH LARGE MOLLUSK FRAGMENTS (UP
TO
2X2CM) MANY OF THE ALLOCHEMS ARE RECRYSTALLIZED. % SAND
VARIES FROM ABOUT 3-40%.

53 - 57 NO SAMPLES

57 - 60 LIMESTONE; LIGHT OLIVE GRAY TO YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS
75% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: SPAR-30%, QUARTZ SAND-25%, SHELL-20%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BRYOZOA
GASTROPODS. LIGHT OLIVE GRAY WACKESTONE MOST OF THE
ALLOCHEMS ARE RECRYSTALLIZED IT IS LESS MOLDIC THAN THE
YELLOWISH GRAY LIMESTONE WHICH VARIES FROM A SANDY
COQUINA

TO A MOLDIC RECRYSTALLIZED WACKESTONE-PACKSTONE.

- 60 - 65 PACKSTONE; YELLOWISH GRAY TO MODERATE LIGHT GRAY
20% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL
85% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: COARSE; RANGE: VERY FINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: QUARTZ SAND-25%, SHELL-40%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: CORAL, ECHINOID, MOLLUSKS, WORM TRACES
BENTHIC FORAMINIFERA
GASTROPODS. WIDE RANGE OF SHELL SIZES - FROM FINELY
GROUND
TO ABOUT 3CM. SANDY, SHELLY, CORALLINE PACKSTONE.
- 65 - 68 LIMESTONE; MODERATE LIGHT GRAY TO GRAYISH BROWN
15% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELETAL
90% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: SHELL-50%, QUARTZ SAND-30%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION, COQUINA
FOSSILS: BRYOZOA, MOLLUSKS, BENTHIC FORAMINIFERA, CORAL
BARNACLES
SAND IS MEDIUM TO COARSE GRAINED. SHELL SIZE VARIES.
PHOSPHATE INDICATOR POSITIVE ON GRAY LIMESTONE.
- 68 - 93 SHELL BED; VERY LIGHT GRAY
20% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-35%
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, BARNACLES
BRYOZOA, ECHINOID
GASTROPODS. 25% SANDY, SHELLY LIMESTONE TO CALCAREOUS
SHELLY SANDSTONE WITH MEDIUM RECRYSTALLIZATION. TRACE OF
PHOSPHATE - GRAVEL AND SAND SIZE AT ABOUT 83FT. LIMESTONE
DECREASES WITH DEPTH TO ABOUT 5%.
- 93 - 110 SAND; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR
GRAIN SIZE: MEDIUM; RANGE: FINE TO VERY COARSE
ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: SHELL- 5%, MICA-<1%
PHOSPHATIC SAND- 2%
FOSSILS: BARNACLES, MOLLUSKS
SMALL AMOUNT OF IRON STAINING FROM 103-110FT. MORE
CALCAREOUS AND ABOUT 35% CLAY.

110 - 118 SANDSTONE; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC
GRAIN SIZE: MEDIUM; RANGE: FINE TO VERY COARSE
LOW SPHERICITY; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SHELL-45%, MICA-<1%
PHOSPHATIC SAND-<2%, PHOSPHATIC GRAVEL-<1%
OTHER FEATURES: COQUINA, MEDIUM RECRYSTALLIZATION
FOSSILS: BARNACLES, MOLLUSKS, BRYOZOA, ECHINOID
LARGE AMOUNT OF LOOSE SAND AND SHELL PRESENT. SCATTERED
SMALL CLAY BALLS. LOOSE SAND DECREASES WITH DEPTH.

118 - 122 SANDSTONE; YELLOWISH GRAY TO MODERATE LIGHT GRAY
20% POROSITY: INTERGRANULAR, MOLDIC
GRAIN SIZE: FINE; RANGE: FINE TO VERY COARSE
LOW SPHERICITY; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SHELL-45%, MICA-<1%
PHOSPHATIC SAND- 3%, PHOSPHATIC GRAVEL- 1%
OTHER FEATURES: COQUINA, MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BARNACLES, BRYOZOA
BENTHIC FORAMINIFERA, WORM TRACES
GASTROPODS. LITHOLOGY VARIES: SHELLY SANDSTONE (FINER
GRAINED THAN ABOVE) AND A MEDIUM GRAY SANDY
RECRYSTALLIZED
RECRYSTALLIZED
COQUINA. LOOSE SMOOTH DISK SHAPED GRAVEL AND
CLUSTERS OF PELLETS OR PELOIDS.

122 - 140 SANDSTONE; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC
GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE
LOW SPHERICITY; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
CLAY MATRIX
ACCESSORY MINERALS: SHELL-30%, PHOSPHATIC SAND- 5%
MICA-<1%
OTHER FEATURES: COQUINA
FOSSILS: BRYOZOA, BARNACLES, MOLLUSKS, CRUSTACEA
GASTROPOD AND CLAM MOLDS AND CAST. SHELLS MUCH LARGER
THAN
ABOVE MANY 3-5CM. PHOSPHATE VERY FINE GRAINED.

140 - 157 SHELL BED; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC; UNCONSOLIDATED
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND- 5%, LIMESTONE- 3%
FOSSILS: BARNACLES, MOLLUSKS, ECHINOID, WORM TRACES
CRUSTACEA
BRYOZOA. ABOUT 35% OF SAMPLE IS PHOSPHATIC SANDSTONE AS
ABOVE. TRACE OF SMOOTH DISK SHAPED QUARTZ GRAVEL. 15%
LOOSE

IN SAND IS COARSE TO GRAVEL SIZE, SMOOTH AND ROUNDED. SAND
THE SANDSTONE IS MUCH FINER GRAINED.

157 - 163 SAND; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC
GRAIN SIZE: MEDIUM; RANGE: FINE TO GRANULE
ROUNDNESS: SUB-ANGULAR TO ROUNDED; LOW SPHERICITY
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND-15%, SHELL- 8%
FOSSILS: MOLLUSKS, BARNACLES, ECHINOID, CRUSTACEA

163 TOTAL DEPTH