

DLBS-3

LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W-17788

COUNTY - DADE

TOTAL DEPTH: 181 FT.

LOCATION: T.54S R.39E S.23 DD

SAMPLES - NONE

LAT = 25D 43M 09S

LON = 80D 29M 47S

COMPLETION DATE: 05/22/96

ELEVATION: 5 FT

OTHER TYPES OF LOGS AVAILABLE - NONE

OWNER/DRILLER: SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WORKED BY: CINDY FISCHLER. COMPLETED OCT. 1999. SFWMD #025080017
025-14 DLBS-3 SOUTH MIAMI N.W. FLA PLANAR X 665810 STATE COORD. Y 503916
ACTUAL FOOTAGE IS LESS THAN STATED INTERVAL.

0 - 177 . 121PCPC Pliocene-Pleistocene
177. - . 122HTRN Hawthorn Group

- 0 - 2 LIMESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE
15% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC
75% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX
ACCESSORY MINERALS: SPAR-10%, ORGANICS- 5%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA
PLANT REMAINS, GASTROPOD AND CLAM MOLDS. POORLY WASHED.
- 2 - 4 LIMESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE
15% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX
ACCESSORY MINERALS: SPAR-15%, ORGANICS- 3%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
SOME OF THE FRAGMENTS HAVE AN OOLITIC FABRIC. POORLY WASHED.
- 4 - 6 LIMESTONE; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELTAL CAST, OOLITE
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX
ACCESSORY MINERALS: SPAR-10%, ORGANICS-10%
QUARTZ SAND-10%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
POORLY WASHED. GASTROPOD AND CLAM CAST AND MOLDS. LARGE

VOIDS. SOME IRON STAINING. SAND FILLING SOME OF THE VOID.
LITHOLOGY VARIES: OOLITIC FABRIC, SOMETIMES CHALKY; AND
HIGHLY MOLDIC WITH CALCITE STREAKS; AND A MICRITE.

- 6 - 10 LIMESTONE; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, OOLITE
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: BRYOZOA
POORLY WASHED. LARGE DISSOLUTION VOID, PROBABLY BRYOZOAN
MOLDS. OOLITIC FABRIC SOFT AND CHALKY IN PLACES. CLAM AND
GASTROPOD CAST.
- 10 - 15 LIMESTONE; YELLOWISH GRAY TO MODERATE LIGHT GRAY
15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, CRYSTALS, SKELTAL CAST
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-15%, QUARTZ SAND- 5%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, BRYOZOA
CLAM AND GASTROPOD CAST. DISSOLUTION VOID SOME COATED WITH
DRUSY CALCITE. MOTTLED LIMESTONE. FOSSILIFEROUS OOLITIC
FABRIC VARIES FROM CHALKY TO MEDIUM TO HIGH
RECRYSTALLIZATION. SOME IRON STAINING. SAND INCREASES WITH
DEPTH. SOME OF THE LIMESTONE HAS A REDDISH COLOR (IN THE
CHALKY SOFT LIMESTONE).
- 15 - 18 WACKESTONE; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, SKELTAL CAST, 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: QUARTZ SAND- 5%, SPAR-20%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, WORM TRACES, MILIOLIDS
CLAM AND GASTROPOD CAST. IRON STAINING.
- 18 - 20 LIMESTONE; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: CALCILUTITE, SKELTAL CAST, CRYSTALS
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT

ACCESSORY MINERALS: SPAR-10%, QUARTZ SAND- 5%
ABUNDANT GASTROPOD CAST AND MOLDS. SOLUTION VOIDS. DRUSY
CALCITE COATING ON SOME PIECES.

- 20 - 22 LIMESTONE; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC
POSSIBLY HIGH PERMEABILITY
GRAIN TYPE: CALCILUTITE, SKELTAL CAST, CRYSTALS
90% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-10%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA
ABUNDANT SMALL RECRYSTALLIZED GASTROPOD CAST AND
RECRYSTALLIZED SHELL FRAGMENTS. SOLUTION VOIDS. PISOLITIC
MEDIUM TO HIGH RECRYSTALLIZATION.
- 22 - 24 LIMESTONE; YELLOWISH GRAY
10% POROSITY: INTERGRANULAR, PIN POINT VUGS, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELTAL CAST, CRYSTALS
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-20%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: BRYOZOA
SMALL FRAGMENTS OF LIMESTONE MANY COATED WITH DRUSY
CALCITE. CLAM CAST.
- 24 - 25 LIMESTONE; YELLOWISH GRAY
10% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, SKELTAL CAST, CRYSTALS
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-20%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS
MANY OF THE ALLOCHEMS ARE RECRYSTALLIZED. CLAM AND
GASTROPOD CAST AND MOLDS.
- 25 - 27 MUDSTONE; WHITE TO YELLOWISH GRAY
8% POROSITY: INTERGRANULAR, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, BIOGENIC, CRYSTALS
10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-10%, QUARTZ SAND- 2%
OTHER FEATURES: LOW RECRYSTALLIZATION
FEW GASTROPOD CAST. MICRITE WITH SMALL AMOUNT OF DRUSY

CALCITE. SOLUTION VOIDS. SMALL AMOUNT OF SANDY LIMESTONE.

- 27 - 35 LIMESTONE; WHITE TO YELLOWISH GRAY
10% POROSITY: INTERGRANULAR, VUGULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, BIOGENIC, CRYSTALS
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR- 8%, QUARTZ SAND-20%
OTHER FEATURES: LOW RECRYSTALLIZATION
FOSSILS: CORAL, BRYOZOA
SANDY MOLDIC LIMESTONE. MEDIUM RECRYSTALLIZATION. LARGE
DISSOLUTION VOIDS FROM BRYOZOA AND CORAL MOLDS. SOME LARGE
RECRYSTALLIZED SHELL FRAGMENTS. SPARRY CALCITE INCREASES TO
ABOUT 25%.
- 35 - 43 LIMESTONE; VERY LIGHT ORANGE
10% POROSITY: INTERGRANULAR, PIN POINT VUGS, FRACTURE
GRAIN TYPE: CALCILUTITE, CRYSTALS
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-20%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
MANY SMALL FRACTURES FILLED WITH SPAR. MANY OF THE
ALLOCHEMS HAVE BEEN RECRYSTALLIZED. CLAM MOLDS AND CAST.
- 43 - 46 LIMESTONE; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, SKELTAL CAST
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: QUARTZ SAND-40%, SPAR-15%, SHELL- 5%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, MILIOLIDS, BENTHIC FORAMINIFERA
BARNACLES
VERY SANDY LIMESTONE. CLAM AND GASTROPOD CAST AND MOLDS.
- 46 - 48 SANDSTONE; YELLOWISH GRAY
GRAIN SIZE: MEDIUM; RANGE: FINE TO VERY COARSE
ROUNDNESS: SUB-ANGULAR TO ROUNDED; LOW SPHERICITY
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: SPAR-35%, SHELL-20%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION, CALCAREOUS
FOSSILS: BARNACLES, ALGAE, BRYOZOA, MOLLUSKS
APPEARS TO BE SHELLY, SANDY CONCRETIONS.
- 48 - 58 SAND; LIGHT OLIVE GRAY
15% POROSITY: INTERGRANULAR
GRAIN SIZE: MEDIUM; RANGE: FINE TO GRAVEL; LOW SPHERICITY

POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
ACCESSORY MINERALS: SHELL-35%, SILT-15%
PHOSPHATIC SAND- 3%
FOSSILS: BARNACLES, MOLLUSKS
GASTROPODS. VERY POORLY INDURATED. VERY FINE TO SILT SIZE
PHOSPHATE.

- 58 - 87 SHELL BED; YELLOWISH GRAY TO LIGHT GRAY
20% POROSITY: INTERGRANULAR; UNCONSOLIDATED
ACCESSORY MINERALS: QUARTZ SAND- 5%
FOSSILS: MOLLUSKS, BARNACLES, ECHINOID, BRYOZOA
SHARKS TEETH
GASTROPODS. TRACE OF PHOSPHATE.
- 87 - 117 LIMESTONE; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET
85% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
ACCESSORY MINERALS: QUARTZ SAND-40%, SHELL-25%
PHOSPHATIC SAND- 3%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BARNACLES, BRYOZOA
GASTROPOD AND CLAM CAST AND MOLDS. LITHOLOGY VARIES: VERY
SHELLY, SANDY LIMESTONE TO A VERY SHELLY, CALCAREOUS
SANDSTONE. SHELL MATERIAL INCREASES WITH DEPTH TO ABOUT
40%.
- 117 - 120 SHELL BED; YELLOWISH GRAY
15% POROSITY: INTERGRANULAR; UNCONSOLIDATED
ACCESSORY MINERALS: QUARTZ SAND-35%, SILT-10%
PHOSPHATIC SAND- 3%
FOSSILS: MOLLUSKS, BRYOZOA, ECHINOID, BARNACLES
CALCAREOUS SANDSTONE AND SANDY LIMESTONE FRAGMENTS COULD BE
CAVINGS. <5% QUARTZ GRAVEL.
- 120 - 125 LIMESTONE; LIGHT GRAY
8% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: SKELETAL, SKELTAL CAST, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: SHELL-25%, QUARTZ SAND-25%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BRYOZOA, BARNACLES
MEDIUM TO HIGH RECRYSTALLIZATION. SANDY, SHELLY, MOLDIC
MICRITE. SLIGHTLY DOLOMITIC. MANY OF THE SHELL FRAGMENTS
ARE RECRYSTALLIZED.
- 125 - 140 LIMESTONE; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR, MOLDIC

GRAIN TYPE: SKELTAL CAST, PELLET, SKELETAL
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: SHELL-40%, QUARTZ SAND-35%
PHOSPHATIC SAND- 5%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, BARNACLES, ECHINOID, WORM TRACES
BRYOZOA
PHOSPHATE IS VERY FINE GRAINED. VARIES TO SHELLY CALCAREOUS
SANDSTONE.

140 - 155 SHELL BED; YELLOWISH GRAY TO LIGHT GRAY
20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
UNCONSOLIDATED
FOSSILS: MOLLUSKS, BARNACLES, ECHINOID, BRYOZOA, CORAL
GASTROPODS. ABOUT 30-40% OF INTERVAL IS FRAGMENTS OF
LIMESTONE AS ABOVE. MAYBE CARVINGS OR SHIFTING. THIS IS THE
LAST BOX OF CORE FOR THIS WELL AND IT IS ONLY PARTIALLY
FILLED. SINCE MOST OF THIS SECTION IS UNCONSOLIDATED OR
FRAGMENTED MUCH SHIFTING HAS TAKEN PLACE WHICH COULD
ACCOUNT FOR THE LIMESTONE IN THE SHELL BED. THIS BOX
CONTAINS 135-181 FT

155 - 177 SANDS; YELLOWISH GRAY
20% POROSITY: INTERGRANULAR
GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM; LOW SPHERICITY
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND- 3%, SHELL-10%
FOSSILS: MOLLUSKS, BARNACLES, ECHINOID
WELL SORTED SAND. POORLY INDURATED WITH CALCAREOUS MUD.
TRACE OF MICA. PHOSPHATE IS FINE GRAINED. SAND BECOMES
SLIGHTLY FINER WITH DEPTH.

177 - 181 SILT; LIGHT OLIVE GRAY
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
ACCESSORY MINERALS: QUARTZ SAND- 5%, MICA- 3%
PHOSPHATIC SAND- 5%
OTHER FEATURES: FROSTED, LOW RECRYSTALLIZATION
FOSSILS: SPICULES, BENTHIC FORAMINIFERA
ABUNDANT SPICULES. VERY FINE GRAINED PHOSPHATE.

181 TOTAL DEPTH