LITHOLOGIC WELL LOG PRINTOUT	SOURCE - F	GS
WELL NUMBER: W-17986	COUNTY -	PB99
TOTAL DEPTH: 2370 FT.	LOCATION:	T.47S R.41E S.19
470 SAMPLES FROM 10 TO 2370 FT.		LAT = 26D 21M 20S
		LON = 80D 17M 46S
COMPLETION DATE: N/A	ELEVATION:	12 FT
OTHER TYPES OF LOGS AVAILABLE - NONE		

OWNER/DRILLER:SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WORKED BY:CINDY FISCHLER SFWMD # PBF-10 099-2 5FT. INTERVALS COMPLETED DECEMBER 1999. THERE IS NO MARKED CHANGE IN LITHOLOGY BETWEEN HAWTHORN AND OCALA. THE PICK IS BASED ON THE PRESENCE OF NUMMULITES AND THE LACK OF ANY FOSSILS TO PLACE IT IN THE SUWANNEE OR AVON PARK. ACCORDING TO THE LITERATURE THERE IS NO SUWANNEE IN THIS AREA AND THE PRESENCE OF OCALA IS QUESTIONABLE. THE PRESENCE OF SAND AND PHOSPHATE IS PUZZLING AND MAY BE CAVINGS. THE PICK FOR THE AVON PARK IS BASED ON THE PRESENCE OF DICTYOCONUS AND RECRYSTALLIZED ECHOIDS. THIS PICK COULD BE SLIGHTLY EARLIER AS ONE DICTYOCONUS AMERICANUS IS FOUND AT 1135-1140FT. THERE IS NO DISTINCT CHANGE IN LITHOLOGY.

10.	-205 .	121PCPC	PLIOCENE-PLEISTOCENE
205.	-975 .	122HTRN	HAWTHORN GROUP
975.	-1150 .	1240CAL	OCALA GROUP
1150.	-2070 .	124AVPK	AVON PARK FM.
2070.	-2370 .	1240LDM	OLDSMAR LIMESTONE
1150.	-2070 .	124AVPK	AVON PARK FM.

- 0 10 NO SAMPLES
- 10 15 SANDSTONE; LIGHT OLIVE GRAY TO WHITE 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN SIZE: MEDIUM; RANGE: FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL-30% OTHER FEATURES: MEDIUM RECRYSTALLIZATION, CALCAREOUS FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS, ECHINOID, BARNACLES SMALL FRAGMENTS OF LIMESTONE AND SHELL. SHELL FRAGMENTS ARE VERY WEATHERED. LITHOLOGY VARIES FROM A CALCAREOUS SANDSTONE TO A SANDY LIMESTONE. SMALL AMOUNT OF IRON STAINING.
- 15 20 SHELL BED; YELLOWISH GRAY
 20% POROSITY: INTERGRANULAR; UNCONSOLIDATED
 ACCESSORY MINERALS: LIMESTONE-10%
 FOSSILS: MOLLUSKS, ECHINOID, BARNACLES, CORAL, BRYOZOA
 GASTROPODS. LIMESTONE FRAGMENTS SAME AS ABOVE. SHELL IS
 LESS WEATHERED.
- 20 45 SANDSTONE; YELLOWISH GRAY TO LIGHT GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN SIZE: MEDIUM; RANGE: FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY MODERATE INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX

ACCESSORY MINERALS: SHELL-50% OTHER FEATURES: MEDIUM RECRYSTALLIZATION, CALCAREOUS FOSSILS: MOLLUSKS, BRYOZOA, ECHINOID, CORAL, BARNACLES GASTROPODS. SHELL FRAGMENTS MORE WEATHERED THAN ABOVE. SANDSTONE MORE RECRYSTALLIZED THAN PREVIOUS. SOME RECRYSTALLIZED CLAM AND GASTROPOD CAST AND SANDY CAST OF BURROWS. ABOUT 10-15% SANDY, SHELLY LIMESTONE FRAGMENTS TOWARD BOTTOM.

- 45 50 SHELL BED; YELLOWISH GRAY TO LIGHT GRAY 15% POROSITY: INTERGRANULAR; UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-35% FOSSILS: MOLLUSKS, BRYOZOA, CORAL, ECHINOID SAND IS IN THE FORM OF SMALL CALCAREOUS SANDSTONE FRAGMENTS WITH SOME RECRYSTALLIZATION.
- 50 65 SANDSTONE; YELLOWISH GRAY TO LIGHT GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY MODERATE INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX ACCESSORY MINERALS: SHELL-40%, PHOSPHATIC SAND-<2% FOSSILS: CORAL, BRYOZOA, MOLLUSKS, BARNACLES, ECHINOID SMALL FRAGMENTS OF CALCAREOUS, SHELLY SANDSTONE AND LOOSE SHELL FRAGMENTS.
- 65 70 NO SAMPLES
- 70 110 SANDSTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY GOOD INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX ACCESSORY MINERALS: SHELL-30%, PHOSPHATIC SAND- 3% LIMESTONE-25% OTHER FEATURES: CALCAREOUS FOSSILS: CORAL, MOLLUSKS, BARNACLES, BRYOZOA FRAGMENTS OF RECRYSTALLIZED, SHELLY SANDSTONE AND SANDY SHELLY, RECRYSTALLIZED LIMESTONE. PHOSPHATE IS FINE GRAINED. LIMESTONE INCREASES WITH DEPTH UNTIL IT IS ABOUT EQUAL PARTS SANDSTONE AND LIMESTONE. SHELL FRAGMENTS DECREASE SLIGHTLY.
- 110 205 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS 65% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: QUARTZ SAND-40%, SPAR-10%, SHELL-25% PHOSPHATIC SAND- 2% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BRYOZOA, MOLLUSKS, BARNACLES, CORAL BENTHIC FORAMINIFERA

LITHOLOGY VARIES: SANDY, SHELLY LIMESTONE; CALCAREOUS SHELLY SANDSTONE; AND A SHELLY MICRITE. FEW OF THE FRAGMENTS ARE IRON STAINED. THE SAND IS SLIGHTLY FINER GRAINED TOWARD BOTTOM. ABOUT 2-3% OF THE SAMPLE IS SILT AND CLAY CLAST - BECOMES LESS WITH DEPTH.

- 205 230 SILT; YELLOWISH GRAY POOR INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-25%, PHOSPHATIC SAND- 3% SHELL- 5%, MICA-<1% OTHER FEATURES: CALCAREOUS FOSSILS: SPICULES, MOLLUSKS, BARNACLES, ECHINOID ABOUT 30% OF THE SAMPLE IS SILT COVERED CALCAREOUS SANDSTONE AND SHELLY, SANDY LIMESTONE, PROBABLY CAVINGS. PHOSPHATE IS VERY FINE TO SILT SIZE. SAND IS FINE TO VERY FINE GRAINED. LOOSE SHELL FRAGMENTS VARY WIDELY IN SIZE. TRACE OF PEAT AT 220-225FT.
- 230 270 SILT; LIGHT OLIVE GRAY POOR INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-10% SHELL- 3%, MICA-<1% OTHER FEATURES: CALCAREOUS FOSSILS: SPICULES, MOLLUSKS CLAYEY SILT. PHOSPHATE IS VERY FINE TO SILT SIZE. SAND IS FINE TO VERY FINE GRAINED. TRACE OF PEAT. <5% LIMESTONE AND SANDSTONE AS ABOVE INCREASES WITH DEPTH.
- 270 280 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: SILT-30%, SHELL-15% PHOSPHATIC SAND-10%, QUARTZ SAND-25% FOSSILS: MOLLUSKS LITHOLOGY VARIES: PHOSPHATIC, CLAYEY SILT; CALCAREOUS SANDSTONE; AND SHELLY, SANDY LIMESTONE. PHOSPHATE VERY FINE TO SILT SIZE.
- 280 290 SILT; LIGHT OLIVE GRAY
 POOR INDURATION
 CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
 ACCESSORY MINERALS: LIMESTONE-20%, QUARTZ SAND-25%
 SHELL-10%
 FOSSILS: BARNACLES, MOLLUSKS
 LITHOLOGY VARIES AS ABOVE BUT THERE IS MORE CLAYEY SILT
 THAN LIMESTONE AND SANDSTONE. TRACE OF MICA.

290 - 300 SANDSTONE; LIGHT OLIVE GRAY TO YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE LOW SPHERICITY; GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: LIMESTONE-30%, PHOSPHATIC SAND- 5% SILT-25%, SHELL-15% OTHER FEATURES: CALCAREOUS FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS LITHOLOGY VARIES: CALCAREOUS, PHOSPHATIC, SHELLY SANDSTONE SANDY, FINELY GROUND SHELLY LIMESTONE AND CLAYEY SILT WITH SOME SHELL FRAGMENTS. LIMESTONE INCREASES TOWARD BOTTOM.

300 - 330 LIMESTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: MICROCRYSTALLINE TO GRAVEL GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: QUARTZ SAND-25%, SILT-15%, SHELL-20% PHOSPHATIC SAND- 3% FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS, BENTHIC FORAMINIFERA SHARKS TEETH MOLDIC, SANDY AND SHELLY LIMESTONE WITH FINE GRAINED PHOSPHATE AND A CLAYEY SANDY SILT. SILT INCREASES TO ABOUT 50% WITH DEPTH. FEW LARGE SHELL FRAGMENTS.

- 330 365 SILT; LIGHT OLIVE GRAY
 POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
 ACCESSORY MINERALS: MICA- 2%, PHOSPHATIC SAND- 2%
 QUARTZ SAND-20%, SHELL- 3%
 FOSSILS: SPICULES, ECHINOID, BARNACLES, BRYOZOA, MOLLUSKS
 GASTROPODS. CLAYEY, SANDY SILT. SAND IS FINE TO VERY FINE
 GRAINED. PHOSPHATE IS VERY FINE GRAINED. TRACE OF LIMESTONE
 PROBABLY CAVINGS. SHELL INCREASES TO ABOUT 5% WITH DEPTH.
- 365 380 LIMESTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, BIOGENIC, SKELETAL 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: MICROCRYSTALLINE TO GRAVEL GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SILT-25%, SHELL-20%, QUARTZ SAND-30% MICA-<2% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, VERTEBRATE BARNACLES TURRITELLA. LITHOLOGY VARIES: SHELLY, SANDY LIMESTONE CALCAREOUS SANDSTONE; AND CLAYEY, SANDY SILT. SILT INCREASES TOWARD BOTTOM.

380 - 480 SILT; LIGHT OLIVE GRAY
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: SHELL-<1%, QUARTZ SAND-25%, MICA- 3%
LIMESTONE-<1%
FOSSILS: BENTHIC FORAMINIFERA, SPICULES, SHARKS TEETH
CLAYEY, SANDY SILT. SAND IS FINE TO VERY FINE GRAINED.
TRACE OF PHOSPHATE. INCREASE IN LIMESTONE AT 400-405FT.
ONLY.</pre>

480 - 490 SILT; LIGHT OLIVE GRAY
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
ACCESSORY MINERALS: LIMESTONE-30%, MICA-<2%
QUARTZ SAND-10%, SHELL-<2%
OTHER FEATURES: DOLOMITIC
LIMESTONE IS DOLOMITIC. TRACE OF PHOSPHATE.</pre>

LIMESTONE; YELLOWISH GRAY 490 - 495 10% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: CRYPTOCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX SPARRY CALCITE CEMENT ACCESSORY MINERALS: SILT-25%, MICA-<1%, QUARTZ SAND-20% SHELL- 5% OTHER FEATURES: DOLOMITIC, MEDIUM RECRYSTALLIZATION POORLY WASHED SAMPLE. LIMESTONE VARIES: VERY SANDY PHOSPHATIC LIMESTONE SOME WITH SHELL FRAGMENTS; AND A DOLOMITIC MICRITE WITH MEDIUM TO HIGH RECRYSTALLIZATION. SOME OF THE SILT IS DOLOSILT.

495 - 505 SILT; YELLOWISH GRAY
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, DOLOMITE CEMENT
CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: LIMESTONE-15%, SHELL-<1%
QUARTZ SAND- 5%
OTHER FEATURES: DOLOMITIC, LOW RECRYSTALLIZATION
TRACE OF PHOSPHATE. DOLOSILT PRESENT.</pre>

505 - 550 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, CRYSTALS, SKELETAL 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT SEDIMENTARY STRUCTURES: MOTTLED ACCESSORY MINERALS: PHOSPHATIC SAND- 3%, SHELL- 5% QUARTZ SAND- 5%, SILT- 8% OTHER FEATURES: DOLOMITIC, MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, BRYOZOA, ECHINOID, BENTHIC FORAMINIFERA POORLY WASHED. MICROCRYSTALLINE MICRITE. SHELL FRAGMENTS INCREASE TO ABOUT 40% WITH DEPTH.

550 - 575 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, CRYSTALS, SKELETAL 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: SHELL-35%, PHOSPHATIC SAND- 3%

SILT-15%, QUARTZ SAND-20% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, ECHINOID, BENTHIC FORAMINIFERA, BRYOZOA CRUSTACEA GASTROPODS, TURRITELLA. POORLY WASHED. LITHOLOGY VARIES: MICROCRYSTALLINE MICRITE SLIGHTLY DOLOMITIC; SHELLY, SANDY RECRYSTALLIZED LIMESTONE; PHOSPHATIC SILT SOME OF THE SILT MAY BE DOLOSILT. SOME OF THE SHELLS ARE ENCRUSTED WITH BRYOZOA, ROOTLET OR BURROW CAST OF SAND AND SPAR. <2% MICA. PHOSPHATIC BONE FRAGMENT. 575 - 735 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: SHELL-20%, PHOSPHATIC SAND- 3% QUARTZ SAND- 5% FOSSILS: MOLLUSKS, BARNACLES, ECHINOID, BRYOZOA POORLY WASHED. CALCILUTITE AND SHELL FRAGMENTS; SMALL AMOUNT OF SANDY LIMESTONE. PHOSPHATE IS VERY FINE TO SILT SIZE. SHELL FRAGMENTS VARY WITH DEPTH. TRACE OF MICA. 735 - 765 SHELL BED; YELLOWISH GRAY UNCONSOLIDATED CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX ACCESSORY MINERALS: LIMESTONE-20%, CALCILUTITE-25% PHOSPHATIC SAND- 3% OTHER FEATURES: MEDIUM RECRYSTALLIZATION POORLY WASHED. HARD TO PICK A LITHOLOGY FOR THIS INTERVAL IT APPEARS TO BE MOSTLY SHELL FRAGMENTS WITH MUCH RECRYSTALLIZATION; ALSO POORLY TO UNCONSOLIDATED CALCILUTITE; AND PHOSPHATIC AND SANDY LIMESTONE WITH MEDIUM INDURATION. APPEARS TO BE A SMALL AMOUNT OF DOLOSILT. SHELL DECREASES SLIGHTLY WITH DEPTH AND LIMESTONE INCREASES. 765 - 860 CALCILUTITE; YELLOWISH GRAY 20% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: SHELL-15%, PHOSPHATIC SAND-<2% CHERT-<2% FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA SHARKS TEETH

SLIGHTLY DOLOMITIC. SHELL FRAGMENTS DECREASE WITH DEPTH TO 5-10%. PHOSPHATE INCREASES TO ABOUT 3-5% WITH DEPTH. SMALL AMOUNT OF ROUNDED GRANULE SIZE PHOSPHATE FROM 800-860FT. TRACE OF CALCAREOUS DOLOMITE FROM 825-860FT.

860 - 865 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL-10%, PHOSPHATIC SAND-<2% QUARTZ SAND- 5% OTHER FEATURES: LOW RECRYSTALLIZATION FOSSILS: MOLLUSKS, PLANT REMAINS LITHOLOGY VARIES: PREDOMINENTLY A POORLY INDURATED CALCILUTITE WITH <1% PHOSPHATE AND ROOT TRACES THROUGHOUT SMALLER AMOUNT OF MOLDIC, SANDY LIMESTONE IRON STAINED WITH LOW TO MEDIUM RECRYSTALLIZATION.

- 865 915 CALCILUTITE; YELLOWISH GRAY 20% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 20% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CHERT-<1%, SHELL-<5% PHOSPHATIC SAND-<1% FOSSILS: SHARKS TEETH, ECHINOID, MOLLUSKS, PLANT REMAINS SOME OF THE CLALCILUTITE IS MOTTLED WITH FINE SANDY SILT.
- 915 955 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, CALCILUTITE, BIOGENIC 75% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: GRAVEL; RANGE: CRYPTOCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX ACCESSORY MINERALS: SHELL-50%, CALCILUTITE-35% PHOSPHATIC SAND-<1% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS, BRYOZOA BENTHIC FORAMINIFERA POORLY WASHED. MOST OF THIS INTERVAL APPEARS TO BE RECRYSTALLIZED SHELL FRAGMENTS. TRACE OF SILTY CLAY CAST. CALCILUTITE DECREASES WITH DEPTH.
- 955 975 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND- 5% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, BRYOZOA ABOUT 35% OF THIS INTERVAL IS RECRYSTALLIZED SHELL FRAGMENTS AS ABOVE. SANDY PHOSPHATIC LIMESTONE; POORLY INDURATED MICRITE; AND <1% GREENISH FISSILE CLAY.</pre>
- 975 995 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC

GRAIN TYPE: CALCILUTITE, SKELETAL, SKELTAL CAST 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: PHOSPHATIC SAND- 2%, SHELL-40% OUARTZ SAND- 5% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, BRYOZOA SHARKS TEETH, ECHINOID SMALL CLAM CAST. SEVERAL NUMMULITES PRESENT. INTERVAL IS FINELY FRAGMENTED. LITHOLOGY VARIES: POORLY INDURATED CALCILUTITE WITH SOME PHOSPHATE; SANDY, PHOSPHATIC FOSSILIFEROUS LIMESTONE; AND WHAT APPEARS TO BE LOOSE RECRYSTALLIZED SHELL FRAGMENTS GRANULE SIZE. NUMMULITES INCREASE WITH DEPTH.

995 - 1015 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: PHOSPHATIC SAND- 3%, QUARTZ SAND-10% SHELL-30% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, SHARKS TEETH ECHINOID CLAM CAST, MANY NUMMULITES. LITHOLOGY VARIES: SANDY PHOSPHATIC LIMESTONE; POORLY INDURATED MICRITE SOME WITH SAND. TRACE OF CLAY AND CHERT.

1015 - 1025 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: PHOSPHATIC SAND- 5%, OUARTZ SAND-15% SHELL-20% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, ECHINOID 2 RECRYSTALLIZED DICTYOCONUS, FEW NUMMULITES. LITHOLOGY VARIES: SANDY, PHOSPHATIC LIMESTONE; MICROCRYSTALLINE MICRITE; POORLY INDURATED MICRITE. <1% PHOSPHATIC GRAVEL. INTERVAL IS FINELY FRAGMENTED-SOME PIECES HAVE FINE GRAINED QUARTZ SAND AND PHOSPHATE; OTHER PIECES ARE MEDIUM TO COARSE GRAIN SAND AND PHOSPHATE. PROBABLY CAVINGS.

1025 - 1145 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRANULE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 5%, QUARTZ SAND- 3% GLAUCONITE-<1% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID CRUSTACEA, MILIOLIDS NUMMULITES, CLAM AND GASTROPOD CAST. FINELY FRAGMENTED SAMPLES-COARSE TO GRANULE SIZE PIECES. SAMPLE IS TOO FRAGMENTED TO ESTIMATE ALLOCHEMS. TRACE OF PHOSPHATE. GLAUCONITIC FORAMS AND VERY FINE GRAINS OF GLAUCONITE IN LIMESTONE WITH VERY FINE TO SILT SIZE QUARTZ SAND. SPARRY CALCITE <5%. NUMMULITES SPARSE WITH DEPTH. TRACE OF CHERT. DICTYOCONUS AMERICANUS.

1145 - 1150 NO SAMPLES

1150 - 1190 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC MODERATE INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX DOLOMITE CEMENT ACCESSORY MINERALS: SHELL-<5%, DOLOMITE-<2% OUARTZ SAND-<2% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MILIOLIDS CLAM AND GASTROPOD CAST. MEDIUM TO HIGH RECRYSTALLIZATION. TRACE OF PHOSPHATE. TRACE OF GLAUCONITE (GLAUCONITIC FORAMS AND VERY FINE GRAINS OF GLAUCONITE). SAND IS VERY FINE TO SILT SIZE. SAMPLES NOT QUITE AS FRAGMENTED AS PREVIOUS INTERVAL. TRACE OF CHERT. DOLOMITE DECREASES WITH DEPTH TO 0. SEVERAL DICTYOCONUS OF VARIOUS SIZES. RECRYSTALLIZED ECHINOID AND ECHINOID FRAGMENTS. ABOUT 5-10% OF SAMPLE IS VERY PALE ORANGE PACKSTONE AND INCREASES WITH DEPTH TO 40-50% AT BOTTOM. 1190 - 1195 PACKSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE 15% POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, CRYSTALS 90% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: ORGANICS-<1% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, SHARKS TEETH ALGAE MANY DICTYOCONUS, RECRYSTALLIZED ECHINOID AND ECHINOID FRAGMENTS. PACKSTONE TO GRAINSTONE FINELY FRAGMENTED.

FRAGMENTS. PACKSTONE TO GRAINSTONE FINELY FRAGMENTED. MEDIUM TO HIGH RECRYSTALLIZATION. <10% LIMESTONE AS ABOVE-SANDY, WITH SOME VERY FINE GRAINED PHOSPHATE AND TRACE OF GLAUCONITE. <1% MEDIUM TO COARSE GRAINED PHOSPHATE.

1195 - 1230 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS 80% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 8%, SPAR- 5% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, BRYOZOA, MOLLUSKS CORAL MANY DICTYOCONUS, MANY NUMMULITES. A LOT OF PIPE SCALE PRESENT. LITHOLOGY VARIES: FOSSILIFEROUS PACKSTONE LIMESTONE WITH VERY FINE GRAINED PHOSPHATE AND SAND; MOLDIC LIMESTONE WITH VARYING AMOUNT OF RECRYSTALLIZATION. ABOUT 1% PHOSPHATIC GRAVEL, PROBABLY CAVINGS. PYRITIZED FORAM. SHARK TOOTH, TEXTULARIA, DISCORINOPSIS GUNTERI.

1230 - 1325 LIMESTONE; 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 ACCESSORY MINERALS: SPAR-10%, SHELL- 5% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: ECHINOID, BRYOZOA, BENTHIC FORAMINIFERA, ALGAE MILIOLIDS MANY RECRYSTALLIZED ECHINOID AND ECHINOID FRAGMENTS. MEDIUM TO HIGH RECRYSTALLIZATION. PELLETAL PACKSTONE; MOLDIC LIMESTONE WITH PINPOINT VUGS; MICRITE; AND A SMALL AMOUNT OF SANDY LIMESTONE PROBABLY CAVINGS. DICTYOCONUS VARY FEW TO MANY.

1325 - 1340 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 85% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 3%, CHERT-<1%, SPAR-10% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: ECHINOID, BENTHIC FORAMINIFERA, MOLLUSKS, ALGAE MANY DICTYOCONUS, MANY RECRYSTALLIZED ECHINOID AND ECHINOID FRAGMENTS. PELLETAL-FORAMINIFERAL PACKSTONE; MICRITE MOLDIC FOSSILIFEROUS LIMESTONE; SMALL AMOUNT OF SANDY LIMESTONE PROBABLY CAVINGS. MEDIUM TO HIGH RECRYSTALLIZATION.

1340 - 1380 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE 85% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 8%, SPAR- 5% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, ALGAE, MOLLUSKS BRYOZOA GYPSINA, TEXTULARIA, NUMMULITES, SPIROLINA, MANY DICTYOCONUS. FINELY FRAGMENTED PIECES-SAND TO GRAVEL SIZE (CALCARENITE). FORAMINIFERA, PELLETS, MICRITE, ECHINOID AND ECHINOID FRAGMENTS RECRYSTALLIZED. TRACE OF CHERT.

1380 - 1420 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS GRAIN TYPE: PELLET, SKELETAL, CALCILUTITE 80% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 3%, SPAR- 3% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MILIOLIDS, ALGAE MANY DICTYOCONUS, NUMMULITES, LITUONELLA. PELLETAL FORAMINIFERAL PACKSTONE-GRAINSTONE; MICRITE; SMALL AMOUNT OF VERY FINE GRAINED SANDY PHOSPHATIC LIMESTONE AND PHOSPHATIC GRAVEL PROBABLY CAVINGS.

1420 - 1460 PACKSTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS GRAIN TYPE: PELLET, CALCILUTITE, SKELETAL 85% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 3% FOSSILS: MOLLUSKS, ECHINOID, BENTHIC FORAMINIFERA, ALGAE BRYOZOA LITUONELLA, MANY DICTYOCONUS. PELLETAL, FORAMINIFERAL PACKSTONE; MICRITE; SLIGHTLY DOLOMITIC VUGGY MICRITE; SOME SANDY PHOSPHATIC LIMESTONE CAVINGS. TRACE OF ORGANICS. TRACE OF PHOSPHATIC GRAVEL CAVINGS. SHELL FRAGMENTS DECREASE WITH DEPTH. TRACE OF ALGAE\MICRITE LAMINATIONS.

1460 - 1465 NO SAMPLES

- 1465 1595 PACKSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE 15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE 85% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL-<1% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MOLLUSKS MILIOLIDS LITUONELLA, MANY DICTYOCONUS, TEXTULARIA, SPIROLINA FABULARIA. TRACE OF ALGAE\MICRITE LAMINATIONS. PELLETAL FORAMINIFERAL PACKSTONE; MICRITE WITH VARYING AMOUNT OF RECRYSTALLIZATION. TRACE OF ORGANICS. TRACE OF PYRITE.
- 1595 1660 LIMESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE 10% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 2% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MOLLUSKS POORLY WASHED. DICTYOCONUS, FABULARIA. THIS INTERVAL IS LESS FRAGMENTED THEN PREVIOUS INTERVAL. SOME OF THE MICRITE IS POORLY INDURATED. MICRITE WITH VARYING AMOUNTS OF RECRYSTALLIZATION; PELLETAL, FORAMINIFERAL PACKSTONE. TRACE OF ORGANICS AND PYRITE. TRACE OF ALGAE\MICRITE LAMINATIONS. 2CM CLAM SHELL AT 1610-1615FT.

1660 - 1810 LIMESTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY 15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL-<2% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MOLLUSKS ABUNDANT DICTYOCONUS VARIOUS SIZES. LITHOLOGY VARIES: MICRITE WITH 5-45% ALLOCHEMS WITH VARYING AMOUNT OF RECRYSTALLIZATION AND PINPOINT VUGS; PELLETAL FORAMINIFERAL PACKSTONE; SOME LARGER PIECES OF CALCAREOUS SANDSTONE WITH IRON STAINING PROBABLY CAVINGS. A 3 X 15CM SANDY CLAM CAST WITH IRON STAINING PROBABLY CAVINGS. TRACE OF ORGANICS AND IRON SULFIDE. PLANT MATERIAL FOUND TOWARD BOTTOM-CAVINGS? GRAVEL SIZE PIECE OF FRACTURED QUARTZ FOUND AT 1760-1765FT., AND 1CM SIZE PIECE OF QUARTZ AT 1775-1780FT. 1810 - 1840 LIMESTONE; YELLOWISH GRAY

10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: SHELL-10% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID DICTYOCONUS. MICRITE AND PELLETAL FORAMINIFERAL PACKSTONE. APPEARS TO BE HAWTHORN MATERIAL MIXED WITH AVON PARK PROBABLY CAVINGS. GRAVEL SIZE PHOSPHATE; MICACEOUS, SANDY SILT; SANDY PHOSPHATIC LIMESTONE; AND SHELL MATERIAL APPEARS RECENT. SOME OF THE LIMESTONE IS DOLOMITIC. ABOUT 20-30% OF THE INTERVAL IS SANDY SILT. BONE FRAGMENTS SHARKS TOOTH, TURRITELLA.

1840 - 1845 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: SHELL-10% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID DICTYOCONUS. MICRITE AND PELLETAL, FORAMINIFERAL PACKSTONE. APPEARS TO BE HAWTHORN AND AVON PARK MIXED. SANDY PHOSPHATIC LIMESTONE, MUCH LESS SILT THAN ABOVE. SOME OF THE LIMESTONE IS DOLOMITIC. GRAVEL SIZE PHOSPHATE. PROBABLY CAVINGS.

- 1845 1860 LIMESTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: SHELL- 5% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID MANY DICTYOCONUS SOME LARGE, MANY SMALL ECHINOIDS. TRACE OF ORGANICS. SANDY PHOSPHATIC LIMESTONE PROBABLY CAVINGS. PELLETAL, FORAMINIFERAL PACKSTONE; MOLDIC MICRITE WITH PINPOINT VUGS; SOME POORLY INDURATED CHALKY LIMESTONE.
- 1860 1865 LIMESTONE; YELLOWISH GRAY TO WHITE 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MICROCRYSTALLINE RANGE: MICROCRYSTALLINE TO GRAVEL; MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL-<3% OTHER FEATURES: LOW RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA DICTYOCONUS. DRILLING CEMENT PRESENT. <1% DOLOMITIC LIMESTONE. CHLAKY WHITE LIMESTONE WITH POOR INDURATION MICRITE; AND SOME SANDY PHOSPHATIC LIMESTONE PROBABLY CAVINGS.
- 1865 1885 LIMESTONE; WHITE TO YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 30% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MICROCRYSTALLINE RANGE: MICROCRYSTALLINE TO GRAVEL; MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 8% FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, BRYOZOA DICTYOCONUS, FEW LARGE SHELL FRAGMENTS. DRILLING CEMENT PRESENT. LITHOLOGY VARIES: CHALKY WHITE LIMESTONE WITH POOR

INDURATION; MICRITE; <1% CALCAREOUS, SUCROSIC DOLOMITE TRACE OF SANDY LIMESTONE CAVINGS. <1% IRON SULFATE.

- 1885 1890 LIMESTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL 30% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: SHELL-10% OTHER FEATURES: LOW RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID POORLY WASHED. DICTYOCONUS. APPEARS TO BE AVON PARK AND HAWTHORN MIXED. ABOUT 20% MICACEOUS, SANDY SILT. REST OF INTERVAL CONSISTS OF: MICRITE WITH VARYING AMOUNT OF ALLOCHEMS; DOLOMITIC LIMESTONE; MICROCRYSTALLINE MICRITE SANDY, PHOSPHATIC LIMESTONE WHICH IS PROBABLY CAVINGS.
- 1890 1920 LIMESTONE; YELLOWISH GRAY TO LIGHT GRAY 8% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS 30% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: SHELL- 5%, DOLOMITE- 8% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: ECHINOID, BENTHIC FORAMINIFERA, BRYOZOA BARNACLES DICTYOCONUS. DRILLING CEMENT PRESENT. SANDY PHOSPHATIC LIMESTONE AND PHOSPHATIC GRAVEL PROBABLY CAVINGS. DOLOMITE IS CALCAREOUS. SOME OF THE LIMESTONE PIECES ARE SMOOTH AND ROUNDED. MICROCRYSTALLINE MICRITE; MOLDIC LIMESTONE; LARGE AMOUNT OF SANDY PHOSPHATIC LIMESTONE. DOLOMITE DECREASES WITH DEPTH. 1920 - 1970 LIMESTONE; YELLOWISH GRAY
- 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, CRYSTALS 65% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: SHELL- 5%, DOLOMITE- 2% FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, BARNACLES BRYOZOA, MOLLUSKS MANY DICTYOCONUS, VARIOUS SIZES. TURRITELLA, CLAM SHELLS AND CASTS. SOME OF THE LIMESTONE IS SMOOTH AND ROUNDED. LITHOLOGY VARIES: PELLETAL FORAMINIFERAL PACKSTONE MICROCRYSTALLINE MICRITE; SANDY PHOSPHATIC LIMESTONE PROBABLY CAVINGS. PIECE OF PHOSPHATIC BONE. DOLOMITE IS CALCAREOUS AND MOLDIC AND SOME OF THE ALLOCHEMS APPEAR PHOSPHATIC. TRACE OF CHERT AND PYRITE.

1970 - 1995 CALCARENITE; YELLOWISH GRAY TO WHITE 15% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 85% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY COARSE; RANGE: MICROCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 3% FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, ECHINOID ABUNDANT DICTYOCONUS. PLANT MATERIAL PRESENT. INTERVAL IS FRAGMENTED VERY COARSE TO GRANULE SIZE.

1995 - 2025 LIMESTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 3%, DOLOMITE-<1% FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA MANY DICTYOCONUS. LITHOLOGY VARIES: FORAMINIFERAL, PELLETAL PACKSTONE; MOLDIC MICRITE; SANDY PHOSPHATIC LIMESTONE PROBABLY CAVINGS. DOLOMITE IS BROWN TO GRAY AND CALCAREOUS. POORLY INDURATED CALCILUTITE PRESENT.

- 2025 2055 LIMESTONE; WHITE TO YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, MOLDIC, PIN POINT VUGS GRAIN TYPE: CALCILUTITE, SKELETAL, BIOGENIC 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT ACCESSORY MINERALS: SHELL- 3% OTHER FEATURES: LOW RECRYSTALLIZATION FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, ECHINOID MANY DICTYOCONUS. TRACE OF ORGANIC LAMINATIONS (ALGAE). LITHOLOGY VARIES: POORLY INDURATED CALCILUTITE FORAMINIFERAL, PELLETAL, PACKSTONE WITH MANY DICTYOCONUS VUGGY WHITER MICRITE WITH NO DICTYOCONUS; AND A MOLDIC SANDY, PHOSPHATIC LIMESTONE WITH ORGANICS PROBABLY CAVINGS.
- 2055 2070 LIMESTONE; YELLOWISH GRAY TO LIGHT GRAY 10% POROSITY: INTERGRANULAR, INTERCRYSTALLINE PIN POINT VUGS GRAIN TYPE: CALCILUTITE, CRYSTALS 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: DOLOMITE-40%, SHELL- 3% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS DICTYOCONUS. VUGGY PELLETAL MICRITE; CALCAREOUS DOLOMITE SANDY, MOLDIC LIMESTONE PROBABLY CAVINGS.

2070 - 2145 DOLOSTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY 10% POROSITY: INTERGRANULAR, INTERCRYSTALLINE PIN POINT VUGS; 50-90% ALTERED; ANHEDRAL GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-20%, SHELL-<1% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS POORLY WASHED. FEW DICTYOCONUS. TRACE OF ORGANICS. CALCAREOUS APHANITIC DOLOMITE; MICROCRYSTALLINE DOLOMITE WITH SOME CALCAREOUS ALLOCHEMS. LIMESTONE AS DESCRIBED ABOVE. LIMESTONE DECREASES WITH DEPTH TO <5%.

2145 - 2150 DOLOSTONE; OLIVE GRAY TO VERY LIGHT ORANGE 10% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE MODERATE INDURATION CEMENT TYPE(S): DOLOMITE CEMENT, SPARRY CALCITE CEMENT CALCILUTITE MATRIX ACCESSORY MINERALS: LIMESTONE-10% OTHER FEATURES: HIGH RECRYSTALLIZATION, SUCROSIC, COQUINA FOSSILS: BENTHIC FORAMINIFERA FEW DICTYOCONUS AND SHELLS. DRILLING CEMENT PRESENT. APPEARS TO HAVE CAVINGS: CALCAREOUS PHOSPHATIC SILT, AND A SANDY LIMESTONE SOMETIMES PHOSPHATIC. APHANITIC DOLOMITE AND A FINE CRYSTALLINE, POROUS, VUGGY DOLOMITE. TRACE OF PYRITE.

2150 - 2155 DOLOSTONE; GRAYISH BROWN TO OLIVE GRAY 5% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT, SPARRY CALCITE CEMENT OTHER FEATURES: HIGH RECRYSTALLIZATION, SUCROSIC VUGGY, APHANITIC DOLOMITE WITH DOLOSPAR FILLING THE VUGS FINE EUHEDRAL, POROUS, VUGGY DOLOMITE.

2155 - 2170 DOLOSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE 10% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: MICROCRYSTALLINE RANGE: CRYPTOCRYSTALLINE TO FINE; MODERATE INDURATION CEMENT TYPE(S): DOLOMITE CEMENT, SPARRY CALCITE CEMENT OTHER FEATURES: SUCROSIC, HIGH RECRYSTALLIZATION APHANITIC, DOLOMITE; AND SUCROSIC, VUGGY DOLOMITE. DOLOSPAR COATS SOME PIECES. SOME OF THE DOLOMITE IS DARKER GRAYISH BROWN. TRACE OF ORGANICS.

2170 - 2180 DOLOSTONE; GRAYISH BROWN 5% POROSITY: INTERCRYSTALLINE, VUGULAR; 90-100% ALTERED SUBHEDRAL GRAIN SIZE: MICROCRYSTALLINE RANGE: CRYPTOCRYSTALLINE TO FINE; GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT OTHER FEATURES: SUCROSIC, HIGH RECRYSTALLIZATION APHANITIC DOLOMITE AND A MICROCRYSTALLINE VUGGY DOLOMITE. SOME OF THE VUGS AND DOLOMITE ARE COATED WITH DOLOSPAR. SAMLL AMOUNT OF DARK GRAY DOLOMITE.

- 2180 2185 DOLOSTONE; GRAYISH BROWN TO LIGHT OLIVE GRAY 5% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: MICROCRYSTALLINE RANGE: CRYPTOCRYSTALLINE TO FINE; GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: PYRITE-<1%, LIMESTONE- 2% OTHER FEATURES: HIGH RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA APHANITIC, VUGGY DOLOMITE WITH DOLOSPAR AND FLECKS OF PYRITE; APHANITIC DOLOMITE WITH RECRYSTALLIZED ALLOCHEMS. LIMESTONE IS POOR TO MEDIUM INDURATION PROBABLY CAVINGS.
- 2185 2200 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH BROWN 15% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: VERY FINE; RANGE: CRYPTOCRYSTALLINE TO FINE MODERATE INDURATION CEMENT TYPE(S): DOLOMITE CEMENT OTHER FEATURES: HIGH RECRYSTALLIZATION, SUCROSIC FOSSILS: VERTEBRATE DICTYOCONUS, AND TRACE OF LIMESTONE PROBABLY CAVINGS. TRACE OF ORGANICS. APHANITIC, VUGGY DOLOMITE WITH SOME DOLOSPAR-GOOD INDURATION; EUHEDRAL TO SUBHEDRAL, POROUS VUGGY, POORLY INDURATED, MICROCRYSTALLINE DOLOMITE.
- 2200 2205 DOLOSTONE; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE 5% POROSITY: INTERGRANULAR, INTERCRYSTALLINE, VUGULAR 50-90% ALTERED; SUBHEDRAL GRAIN SIZE: VERY FINE; RANGE: CRYPTOCRYSTALLINE TO MEDIUM GOOD INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-20% OTHER FEATURES: HIGH RECRYSTALLIZATION DOLOMITIC LIMESTONE WITH DOLOSPAR FILLING VUGS AND REPLACING ALLOCHEMS; AND A MORE COARSELY CRYSTALLINE BROWNISH GRAY DOLOMITE.
- 2205 2210 DOLOSTONE; GRAYISH BROWN 10% POROSITY: INTERCRYSTALLINE, VUGULAR; 90-100% ALTERED SUBHEDRAL GRAIN SIZE: VERY FINE; RANGE: CRYPTOCRYSTALLINE TO FINE MODERATE INDURATION CEMENT TYPE(S): DOLOMITE CEMENT OTHER FEATURES: SUCROSIC, HIGH RECRYSTALLIZATION SUCROSIC DOLOMITE AND A VUGGY, MICROCRYSTALLINE DOLOMITE.
- 2210 2215 DOLOSTONE; GRAYISH BROWN TO VERY LIGHT ORANGE 5% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL

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

- 2215 2240 DOLOSTONE; GRAYISH BROWN 5% POROSITY: INTERCRYSTALLINE, VUGULAR; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: FINE; RANGE: CRYPTOCRYSTALLINE TO MEDIUM GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT OTHER FEATURES: HIGH RECRYSTALLIZATION TRACE OF POORLY INDURATED WHITE LIMESTONE PROBABLY CAVINGS. FINELY, CRYSTALLINE, POROUS, VUGGY DOLOMITE; APHANTIC DOLOMITE; AND A MORE COARSELY CRYSTALLINE DOLOMITE. ALL WITH VARYING AMOUNTS OF VUGGINESS. COLOR DARKENS WITH DEPTH.
- 2240 2245 LIMESTONE; YELLOWISH GRAY 5% POROSITY: INTERGRANULAR, INTERCRYSTALLINE GRAIN TYPE: CRYSTALS, CALCILUTITE 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM GOOD INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, DOLOMITE CEMENT ACCESSORY MINERALS: DOLOMITE- 5% OTHER FEATURES: HIGH RECRYSTALLIZATION, DOLOMITIC DOLOMITE PROBABLY CAVINGS. DOLOMITIC LIMESTONE WITH RECRYSTALLIZED ALLOCHEMS AND MANY PIECES COATED WITH DOLOSPAR OR SPARRY CALCITE. TRACE OF GLAUCONITE AND PYRITE.
- 2245 2250 DOLOSTONE; LIGHT GRAY TO VERY LIGHT ORANGE 5% POROSITY: INTERGRANULAR, INTERCRYSTALLINE 50-90% ALTERED; SUBHEDRAL GRAIN SIZE: MICROCRYSTALLINE RANGE: CRYPTOCRYSTALLINE TO FINE; GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT, SPARRY CALCITE CEMENT ACCESSORY MINERALS: LIMESTONE-10% OTHER FEATURES: HIGH RECRYSTALLIZATION DRILLING CEMENT PRESENT. VERY FINE GRAINED DOLOMITE WITH DOLOSPAR AND RECRYSTALLIZED ALLOCHEMS.
- 2250 2280PACKSTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, INTERCRYSTALLINE GRAIN TYPE: PELLET, SKELETAL, CRYSTALS 95% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM POOR INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX DOLOMITE CEMENT ACCESSORY MINERALS: DOLOMITE-10% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID DICTYOCONUS. FEW LARGER PIECES OF FINE GRAINED DOLOMITE AS ABOVE PROBABLY CAVINGS. RECRYSTALLIZED SHELL FRAGMENTS. FRAGMENTED PELLETAL PACKSTONE WITH FINE GRAINED DOLOMITE RHOMBS.

2280 - 2285 PACKSTONE; YELLOWISH GRAY 10% POROSITY: INTERGRANULAR, INTERCRYSTALLINE GRAIN TYPE: PELLET, SKELETAL, CRYSTALS 80% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM MODERATE INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX DOLOMITE CEMENT ACCESSORY MINERALS: DOLOMITE-35% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID PELLETAL, FORAMINIFERAL PACKSTONE WITH FINE GRAINED DOLOMITE RHOMBS; AND DOLOMITE THAT IS APHANITIC TO SUCROSIC. MEDIUM TO HIGH RECRYSTALLIZATION. DICTYOCONUS.

- 2285 2320 PACKSTONE; YELLOWISH GRAY 15% POROSITY: INTERGRANULAR, INTERCRYSTALLINE GRAIN TYPE: PELLET, SKELETAL, CRYSTALS 90% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRAVEL POOR INDURATION CEMENT TYPE(S): SPARRY CALCITE CEMENT, CALCILUTITE MATRIX DOLOMITE CEMENT ACCESSORY MINERALS: DOLOMITE-15% OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID FORAMINIFERAL, PELLETAL PACKSTONE TO GRAINSTONE WITH FINE GRAINED DOLOMITE RHOMBS; AND DOLOMITE THAT IS APHANITIC TO SUCROSIC AND VUGGY. ABOUT 3% RECRYSTALLIZED SHELL FRAGMENTS. DOLOMITE DECREASES WITH DEPTH. DICTYOCONUS.
- 2320 2370 PACKSTONE; YELLOWISH GRAY 20% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: PELLET, SKELETAL, CALCILUTITE 90% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: MICROCRYSTALLINE TO GRAVEL MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MILIOLIDS BRYOZOA FORMINIFERAL, PELLETAL PACKSTONE. DICTYOCONUS. RECRYSTALLIZED SHELL AND ECHINOID AND ECHINOID FRAGMENTS.

2370 TOTAL DEPTH