FGS Lithologic Doscription: W-16098 SFWMD Geophy. Log # 071-28

North Ft Myers NW LITHOLOGIC WELL LOG PRINTOUT

SOURCE - FGS

WELL NUMBER: W- 16098

TOTAL DEPTH: 2600 FT.

249 SAMPLES FROM 0 TO 2600 FT.

COUNTY - LEELEE1

LOCATION: T.43S R.24E S.14

LAT = 26D 43M 58S

LON = 81D 52M 54S

COMPLETION DATE: 01/25/87

OTHER TYPES OF LOGS AVAILABLE - OTHER

ELEVATION: 18 FT

OWNER/DRILLER: NORTH FT. MEYERS UTILITY CO. MONITOR WELL DRILLERS, INC., DRILLER.

WORKED BY: __JOE AYLOR (1/30/95), 10 FOOT SAMPLE INTERVALS SFWMD LEE COUNTY. LOCATED IN THE " CENTER, SEC 14, T43S, R24E UTM PLANAR, ZONE 17 X=412315.8, Y=2956976.0 FLORIDA WEST ZONE IN FEET, POLYCONIC PLANAR X=538625; PLANAR Y=872068 WELL IS LOCATED IN THE FORT MEYERS NW 7.5 MINUTE QUADRANGLE.

THE OKEECHOBEE FORMATION IS PROPOSED FOR THE PLIO-PLEISTOCENE INTERVAL (SCOTT, 1992, P. 23, FLORIDA GEOLOGICAL SURVEY SPECIAL PUBLICATION 36).

0.	- 10.	090UDSC	UNDIFFERENTIATED SA	AND AND CLAY	P BSJ Repo	et bester
10.	- 240.	121PCPC	PLIOCENE-PLEISTOCE	lE .	<i>—</i>	
240.	- 1220.	122HTRN	HAWTHORN GROUP	HAWHORN).	606'	
1220.	- 1760.	1240CAL	OCALA GROUP	Sowannee		
1760.	• .	124AVPK	AVON PARK FM.		= :	
1330.	- 1350.	000NOSM	NO SAMPLES	ocalca 1310-1570		
1600.	- 1610.	000NOSM	NO SAMPLES	Avor Punk	1570-1940	
1640.	- 1670	000NOSM	NO SAMPLES	Late Ad.	16.10 0 100	
1970.	- 1980.	000NOSM	NO SAMPLES	24116 City	1940, 2490 2490-2600	
2260.	- 2270.	000NOSM	NO SAMPLES	Ulds Man	2490-2600	
2350.	- 2360.	000NOSM	NO SAMPLES			
2430.	- 2440.	000NOSM	NO SAMPLES			

Sowanee @ 760

0 - 10 SAND; GRAYISH BROWN

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM ROUNDNESS: SUB-ANGULAR TO ROUNDED; MEDIUM SPHERICITY **UNCONSOLIDATED** ACCESSORY MINERALS: SHELL-45%, CALCILUTITE-05% LIMONITE- X OTHER FEATURES: CALCAREOUS FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS

10 - 30 SAND; LIGHT GRAY

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM ROUNDNESS: SUB-ANGULAR TO ROUNDED; MEDIUM SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: SHELL-20%, HEAVY MINERALS-02% FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS MICA LOST CIRCULATION MATERIAL, TOP OF PLIO-PLEISTOCENE AT 10 FEET.

- 30 150 SAND; YELLOWISH GRAY
 20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
 GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM
 ROUNDNESS: SUB-ANGULAR TO ROUNDED; MEDIUM SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: SHELL-10%, HEAVY MINERALS-02%
 FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS
- 150 210 SAND; LIGHT GRAY
 20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
 GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM
 ROUNDNESS: SUB-ANGULAR TO ROUNDED; MEDIUM SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: SHELL-05%, PHOSPHATIC SAND-03%
 HEAVY MINERALS-02%
 FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS
- 210 240 SAND; YELLOWISH GRAY
 20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
 GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM
 ROUNDNESS: SUB-ANGULAR TO ROUNDED; MEDIUM SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: SHELL-10%, PHOSPHATIC SAND-02%
 HEAVY MINERALS-01%, LIMESTONE-10%
 FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS
 TOP OF HAWTHORN GROUP AT 240 FEET
- 240 310 LIMESTONE; YELLOWISH GRAY
 20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
 GRAIN TYPE: BIOGENIC, CALCILUTITE
 95% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
 POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: SHELL-30%, QUARTZ- %
 PHOSPHATIC SAND- %
 FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS
- 310 320 SAND; VERY LIGHT GRAY
 20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
 POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: SHELL-15%, QUARTZ- %
 PHOSPHATIC SAND-01%, CALCILUTITE-20%
 FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS

320 - 370 LIMESTONE; WHITE

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY GRAIN TYPE: BIOGENIC, CALCILUTITE 85% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: SHELL-02%, PHOSPHATIC SAND-02% CALCILUTITE-10%, QUARTZ SAND-10% FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID

370 - 410 LIMESTONE; VERY LIGHT GRAY

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

75% ALLOCHENICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-02%, CALCILUTITE-20%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID

GASTROPODS

410 - 620 LIMESTONE; VERY LIGHT GRAY

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-30%, PHOSPHATIC SAND-02%

SHELL-03%, QUARTZ SAND-20%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID

20% LIGHT GRAY CALCAREOUS, VERY FINE-GRAINED SANDSTONE.

620 - 650 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

80% ALLOCHENICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-15%, PHOSPHATIC SAND-02%

QUARTZ SAND-20%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID

650 - 690 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

75% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-15%, PHOSPHATIC SAND-01%

SPAR-10%, QUARTZ SAND-20%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID

690 - 740 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

75% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-10%, PHOSPHATIC SAND-01%

SPAR-10%, QUARTZ SAND-20%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, MILIOLIDS

WHITE LIMESTONE 60%, LIGHT GRAY LIMESTONE 20%, SAND IS ALSO

LIGHT GRAY.

740 - 780 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-35%, PHOSPHATIC SAND-02%

SHELL-02%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS

VERY LIGHT-GRAY LIMESTONE 65%, MEDIUM-LIGHT GRAY

FINE-GRAINED SAND 35%. SOME CAVINGS OF SAND.

780 - 890 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
GRAIN TYPE: BIOGENIC, CALCILUTITE

70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-30%, SPAR-05%, SHELL-03%
PHOSPHATIC SAND-03%
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID
GASTROPOOS, ECHINOID STEMS, MEDIUM-LIGHT GRAY, FINE-GRAINED
SAND 30%

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY GRAIN TYPE: BIOGENIC, CALCILUTITE
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-05%, QUARTZ SAND-30%

FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, BRYOZOA

SAND MAY BE FROM CAVINGS.

950 - 970 LIMESTONE; WHITE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

890 - 950 LIMESTONE; VERY LIGHT GRAY

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-30%, SPAR-05%

PHOSPHATIC SAND-01% FOSSILS: MILIOLIDS

MILIOLID FORAMS 60%.

970 - 1020 DOLOSTONE; GRAYISH BROWN

10% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

50-90% ALTERED; SUBHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

MODERATE INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LINESTONE-30%

1020 - 1030 SAMPLES PROBABLY HAVE CAVED FROM 755 TO 1030' (ON

GEOPHYSICAL LOGS)

1030 - 1040 LIMESTONE; GRAYISH ORANGE PINK

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-05%, PHOSPHATIC SAND-01%

FOSSILS: FOSSIL FRAGMENTS, BRYOZOA, ECHINOID, MOLLUSKS

GASTROPODS (?).

1040 - 1160 CALCARENITE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

UNCONSOLIDATED

ACCESSORY MINERALS: QUARTZ SAND-20%, SPAR-05%

PHOSPHATIC SAND-01%, HEAVY MINERALS-01%

FOSSILS: ECHINOID CARBONATE SAND

1160 - 1220 LIMESTONE; VERY LIGHT ORANGE

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-25%, PHOSPHATIC SAND-01%

FOSSILS: BRYOZOA, ECHINOID 5% MEDIUM-GRAY DOLOSTONE.

1220 - 1230 LIMESTONE: VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-40%, SPAR-05%

PHOSPHATIC SAND-01%

FOSSILS: BENTHIC FORAMINIFERA

TOP OF OCALA FORMATION AT 1220 FEET, GYPSINA GLOBULA (?).

1230 - 1310 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: CALCILUTITE-40%
FOSSILS: ECHINOID, BENTHIC FORAMINIFERA

NUMMULITES SP. (1230-1310), LEPIDOCYCLINA SP (1240-1310).

1310 - 1330 LIMESTONE: VERY LIGHT ORANGE

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 80% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO VERY COARSE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, CONES, BRYOZOA
NUMMULITES SP 20%, LEPIDOCYCLINA SP. DICTYOCONUS COOKEI

(?), REPLACEMENT OF GASTROPOD BY PHOSPHATE.

1330 - 1350 NO SAMPLES

1350 - 1440 LIMESTONE; VERY LIGHT ORANGE

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 80% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO VERY COARSE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: BENTHIC FORAMINIFERA, MILIOLIDS

NUMMULITES SP. 30%, LEPIDOCYCLINA SP. (1390-1440), SEA

URCHIN DISC 1/2 CM (1360-1370).

1440 - 1510 LIMESTONE; VERY LIGHT GRAY

20% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO VERY COARSE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: BENTHIC FORAMINIFERA, MILIOLIDS, BRYOZOA

15% LIGHT-GRAY, FINE-GRAINED SAND CAVINGS, NUMMULITES SP.

20%, BRYOZOAN (1500-1510).

1510 - 1540 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO VERY COARSE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: BENTHIC FORAMINIFERA, MILIOLIDS, BRYOZOA

MOLLUSKS

LEPIDOCYCLINA SP., NUMMULITES SP.

1540 - 1600 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO VERY COARSE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-20%, SPAR-10%

FOSSILS: BENTHIC FORAMINIFERA, MILIOLIDS, BRYOZOA

MILIOLID FORAMS 50%, NUMMULITES SP. 10%.

1600 - 1610 NO SAMPLES

1610 - 1640 LIMESTONE; VERY LIGHT ORANGE
15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
GRAIN TYPE: BIOGENIC, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: VERY FINE TO VERY COARSE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: SPAR-10%
FOSSILS: ECHINOID

1640 - 1670 NO SAMPLES

1670 - 1710 LIMESTONE; WHITE

10% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-20%, CALCILUTITE-20%

FOSSILS: MILIOLIDS

2% LIGHT GRAY LIMETSTONE, MILIOLID FORAMS 50%.

1710 - 1720 LIMESTONE; WHITE

10% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CALCILUTITE-20%

FOSSILS: MILIOLIDS

MILIOLID FORAMS 50%.

1720 - 1730 LIMESTONE; VERY LIGHT ORANGE

10% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 75% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: MILIOLIDS, ECHINOID

MILIOLID FORAMS 75%.

1730 - 1750 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE

50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%, CALCILUTITE-10%

FOSSILS: MILIOLIDS

MILIOLID FORAMS 60%

1750 - 1760 LIMESTONE; GRAYISH BROWN

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: VERY FINE TO VERY COARSE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-30%, CALCILUTITE-10%

FOSSILS: MILIOLIDS

PALE YELLOWISH BROWN RECRYSTALLIZED CALCITE.

1760 - 1780 DOLOSTONE; LIGHT GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: FINE; RANGE: VERY FINE TO VERY COARSE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-10%

FOSSILS: NO FOSSILS

TOP OF AVON PARK FORMATION AT 1760 FEET.

1780 - 1790 DOLOSTONE; GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: FINE; RANGE: VERY FINE TO VERY COARSE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-05%

FOSSILS: NO FOSSILS

1790 - 1800 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-40%, CALCILUTITE-10%

FOSSILS: MILIOLIDS

40% PALE YELLOWISH BROWN DOLOSTONE.

1800 - 1830 LIMESTONE; WHITE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: MILIOLIDS MILIOLID FORAMS 80%.

1830 - 1840 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-30%

FOSSILS: MILIOLIDS

DARK YELLOWISH BROWN DOLOSTONE 30%.

1840 - 1850 LIMESTONE; GRAYISH BROWN

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-30%

FOSSILS: MILIOLIDS

1850 - 1890 LIMESTONE; WHITE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-10%

FOSSILS: MILIOLIDS

10% PALE BROWN DOLOSTONE, MILIOLID FORAMS 80%.

1890 - 1900 DOLOSTONE; LIGHT GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-35%

FOSSILS: MILIOLIDS

1900 - 1920 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POCR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: LIMESTONE-30%

FOSSILS: MILIOLIDS MILIOLID FORAMS 60%.

1920 - 1930 DOLOSTONE; GRAYISH BROWN TO LIGHT GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-05%

FOSSILS: MILIOLIDS

1930 - 1940 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-30%

FOSSILS: MILIOLIDS, CONES

DICTYOCONUS COOKEI.

1940 - 1950 DOLOSTONE: GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-30%

1950 - 1970 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE: RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-05%

FOSSILS: MILIOLIDS

1970 - 1980 NO SAMPLES

1980 - 2000 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10% FOSSILS: MILIOLIDS, CONES

DICTYOCONUS COOKEI, MILIOLID FORAMS 70%.

2000 - 2010 DOLOSTONE; GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-10%

FOSSILS: MILIOLIDS

2010 - 2040 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-30%

FOSSILS: MILIOLIDS

DICTYOCONUS COOKEI 5%.

2040 - 2050 DOLOSTONE: DARK YELLOWISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-10%

2050 - 2060 LIMESTONE; VERY LIGHT GRAY

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: DOLOMITE-35%

FOSSILS: MILIOLIDS

35% DARK YELLOWISH BROWN DOLOSTONE.

2060 - 2090 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-05%

FOSSILS: MILIOLIDS

2090 - 2110 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-15%

FOSSILS: MILIOLIDS

2110 - 2140 DOLOSTONE; DARK YELLOWISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-10%

FOSSILS: MILIOLIDS

2140 - 2150 DOLOSTONE; MODERATE GRAY

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-15%

2150 - 2160 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE DARK GRAY

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-05%

FOSSILS: MILIOLIDS

2160 - 2170 LIMESTONE; GRAYISH BROWN

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: DOLOMITE-30%

FOSSILS: MILIOLIDS

2170 - 2190 DOLOSTONE; DARK YELLOWISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT ACCESSORY MINERALS: LIMESTONE-05%

FOSSILS: NO FOSSILS

2190 - 2200 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-20%, SPAR-10%

FOSSILS: MILIOLIDS

2200 - 2250 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SPAR-10%

FOSSILS: MILIOLIDS

DICTYOCONUS COOKEI (2200-2210)

2250 - 2260 DOLOSTONE; DARK YELLOWISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2260 - 2270 NO SAMPLES

2270 - 2280 DOLOSTONE; DARK YELLOWISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2280 - 2290 DOLOSTONE; GRAYISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2290 - 2300 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE DARK GRAY

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2300 - 2310 DOLOSTONE; GRAYISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2310 - 2340 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE DARK GRAY

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2340 - 2350 DOLOSTONE; GRAYISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2350 - 2360 NO SAMPLES

2360 - 2370 LIMESTONE; MODERATE LIGHT GRAY

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 30% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: DOLOMITE-10%, QUARTZ SAND-30%

FOSSILS: NO FOSSILS
DRILLER'S CEMENT!

2370 - 2380 DOLOSTONE; GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2380 - 2400 DOLOSTONE; GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE: RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-30%

FOSSILS: MILIOLIDS

2400 - 2410 DOLOSTONE; LIGHT GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-30%

2410 - 2420 DOLOSTONE: BROWNISH GRAY

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2420 - 2430 DOLOSTONE; LIGHT GRAYISH BROWN TO GRAYISH ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: FINE; RANGE: VERY FINE TO VERY COARSE

MODERATE INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-10%

FOSSILS: MILIOLIDS

2430 - 2440 NO SAMPLES

2440 - 2490 DOLOSTONE; LIGHT GRAYISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

FOSSILS: NO FOSSILS

2490 - 2500 DOLOSTONE; GRAYISH BROWN

10% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-35%

FOSSILS: MILIOLIDS

2500 - 2520 DOLOSTONE; GRAYISH BROWN

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-15%

FOSSILS: MILIOLIDS

2520 - 2540 DOLOSTONE; LIGHT BROWNISH GRAY TO BROWNISH GRAY

5% POROSITY: INTERGRANULAR, LOW PERMEABILITY

50-90% ALTERED; EUHEDRAL

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM

GOOD INDURATION

CEMENT TYPE(S): DOLOMITE CEMENT

ACCESSORY MINERALS: LIMESTONE-30%

Page 18 (W-16098)

2540 - 2600 LIMESTONE; VERY LIGHT ORANGE

15% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY

GRAIN TYPE: BIOGENIC, CALCILUTITE 50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PEAT-20%, SPAR-10%

OTHER FEATURES: CALCAREOUS

FOSSILS: MILIOLIDS

2600 TOTAL DEPTH