EXECUTIVE SUMMARY
TR 13-1X (East Bay)
Pinellas County
Basin 16, S35, T29S, R15E
16-020-017

October 2, 1985

Jim Clayton

I. SITE LOCATION AND DESCRIPTION

The TR13-1X wellsite is located in the city of Largo in Pinellas County, Florida. The wellsite can be found by traveling approximately 0.6 miles east on S.R. 686 (East Bay Drive) from its intersection with S.R. 595A in Largo (See Site Location Map). The wellsite is located on the south side of East Bay Drive behind a metal guard rail and adjacent to a large earthen drainage ditch. The TR13-1X wellsite encompasses a 30' x 70' permanent easement. No construction easement was obtained as this site is located on District-owned property. This site is located approximately 4.2 miles east of the Gulf of Mexico in the NW 1/4 of the NW 1/4 of the SW 1/4 of Section 35, Township 29 South, Range 15 East; at latitude 27° 54' 58" North, longtitude 82° 46' 40" West.

II. TYPE AND PURPOSE OF MONITORS

The primary objectives of these monitor wells are as follows. The deep well will monitor two zones; the "production zone" at the base of the Suwannee Formation and the top of the Ocala Group (permeable zone B - Floridan Aquifer System), and the zone of freshest water in the Tampa Formation (center of permeable zone A - Floridan Aquifer System). The intermediate well will monitor the fresh/saltwater interface in the Upper Suwannee Formation (base of permeable zone A- Floridan Aquifer System). The shallow well will monitor fluctuations in the water table (Surficial Aquifer). Water quality, changes in potentiometric surface levels, and degree of saltwater intrusion will all be monitored at TR13-1X.

These monitor wells (deep, intermediate, and shallow) are designed to emulate several City of Clearwater and City of Dunedin wells that are or will be constructed in the near future. Most of these wells along with the TR14 and TR13 series wells will monitor the same hydrogeologic zones, with the exception of the freshwater zone at the base of the Tampa Formation in the deep monitor well at the TR13-1X site. All these wells establish a much needed network of data points that can be used to more accurately define the geology, hydrology and salt-water intrusion in the northern half of Pinellas County.

III. GEOLOGY

The TR13-1X wellsite is located on the Pamlico Terrace (of Pleistocene age) at an approximate elevation of 10' above MSL. The geology at TR13-1X was interpreted from the 801.5' core at this site as well as from the geophysical logs from this core hole. This core hole was logged by Jerry Idler (U.S.G.S.-Atlanta) and by John Decker with the District's logging equipment, see Table 1. The interpreted stratigraphic sequence for this wellsite is as follows:

SIMPLIFIED LITHOLOGY

Depth (Ft. Below LSD)	Stratigraphic Unit/Age	Lithologic Description
0 - 22'	**Undifferentiated Sands** (Pleistocene)	Sand; quartz, clear-tan, subangular-subrounded, fine-medium grained, slightly calcareous cement, generally unconsolidated, trace phosphate grains, trace shell fragments, 25%-35% intergranular porosity
22' - 78'	**Hawthorn Fm.** (Upper Miocene)	Sand; quartz, clear - light gray, very fine - medium grained, angular-subangular, poor-fair intergranular porosity, trace phosphate grains, clayey in part — Limestone; white, predominantly amorphous, soft-firm, cryptocrystalline - occasionally very fine crystalline, sandy in part, poor - fair intercrystalline porosity, clayey in part — Clay; light gray - gray - gray brown, trace organics, sandy in part.
78' - 229'	**Tampa Fm.** (Lower Miocene)	Limestone; very pale orange - light gray, moderately indurated, crypto-very fine crystalline, micrite - calcarenite, poor intercrystalline porosity - good intergranular and moldic porosity, 5% - 30% porosity, trace foraminifera (Sorites) — Clay; greenish gray-grayish green, gumbo, plastic.
229' - 529'	**Suwannee Fm.** (Oligocene)	Limestone; very pale orange - yellowish gray - light gray, moderately indurated, micrite - calcarenite, microcrystalline - medium grained, poor intercrystalline porosity - good moldic and intergranular

		porosity, 10% - 35% porosity — Lignite; 6" seam @ 396', black, organic, slightly calcareous — Dolomite; 486' - 495', light olive gray - yellowish brown, good induration, poor porosity, tight, some fractures.
529' - 698'	**Ocala Group** (Eocene)	Limestone; yellowish gray - very pale orange, predominantly calcarenite, 10% to 35% intergranular and moldic porosity, moderate - good induration, biogenic, Foraminifera: (Nummulites vanderstoki and Operculinoides) Echinoidea: (Periarchus lyelli floridanus).
698' - 801.5' T.D.	**Avon Park Fm.** (Eocene)	Limestone; light olive gray - yellowish gray, predominantly calcarenite with some micrite, 15% - 30% intergranular and moldic porosity, moderate - good induration, biogenic, Echinoidea: (Peronella dalli) — Dolomite; dusky yellowish brown — pale yellowish brown, microcrystalline - sucrosic, 10% - 30% intercrystalline and fracture porosity, moderate - good induration.

*See Figure 1 for lithologic column and hydrostratigraphy.

IV. HYDROGEOLOGY AND WATER QUALITY

Two aquifers were identified at the TR 13-1X wellsite, the Surficial Aquifer (water table) and the Floridan Aquifer System (See Figure 1).

The Surficial Aquifer extends from LSD to the first bedded clay at approximately 22' below LSD. It is expected that the water table will be within 5 feet of land surface. The following parameters were taken from Appendix B-Summary of Aquifer Parameters for Pinellas County in the "Interim Report 1: Pinellas County Saltwater Modeling Project" prepared by GeoTrans for the Southwest Florida Water Management District. For the Surficial Aquifer; transmissivity (T) was calculated between 200 ft^2/d and 6700 ft^2/d by Spechler (1983), vertical hydraulic conductivity (K_v) was estimated by Hickey (1980) at .36 ft/d to 13 ft/d (avg. 2.6 ft/d,), and horizontal hydraulic conductivity (K_h) was estimated at 33 ft/d by Hickey (1980). The unconsolidated sands of this aquifer are quite porous and permeable. Due to the sensitivity of this aquifer to precipitation, drought, and pumpage it is expected that the water level will fluctuate considerably in the water table monitor well.

The confining bed between the Surficial Aquifer and the Floridan Aquifer System, the Hawthorn Confiner, is primarily composed of gray-green gumbo clay and sandy clay with some sandy limestone. This confiner extends from approximately 22' - 78' below LSD. This encompasses the entire Hawthorn Formation. This material is expected to be an adequate confiner locally but may be leaky or missing in its lateral extent. The following parameters were taken from Appendix B in the "Interim Report 1" by GeoTrans. The vertical hydraulic conductivity (K_v) for this Hawthorn confining unit is estimated at 2 X 10^{-2} ft/d by Hutchinson (1983), 3 x 10^{-3} ft/d by Rosenstein and Hickey (1977), and 1.3 X 10^{-4} ft/d by Hickey (1980). These values being orders of magnitude apart illustrate the variability of K_v for this confiner and/or they illustrate the difficulty in determining an accurate K_v (Figure 1).

As per John J. Hickey in the USGS Water-Supply Paper 2183 the Floridan Aquifer in Pinellas County "includes permeable parts of the Hawthorn Formation that are in hydrologic contact with the rest of the aquifer, and all or parts of the Tampa Limestone, Suwannee Limestone, Ocala Limestone, Avon Park Limestone, and Lake City Limestone". The core at TR13-1X demonstrated no hydrologic contact between the Hawthorn Formation and the Floridan Aquifer System, therefore, for this site the top of the Floridan Aquifer and the top of the Tampa Formation are coincident.

The core at TR13-1X went to a total depth of 801.5' below LSD, into the Avon Park Formation. The Lake City Formation was not penetrated. As discussed in the USGS Water-Supply Paper 2183 there are four (4) permeable zones in the Floridan Aquifer System, zones A, B, C and D from top to bottom. Zones A, B and C were penetrated in this core hole (See Figure 1), however, only zones A and B will be monitored at this time.

Permeable zone A includes the entire Tampa Formation and the upper Suwannee Formation and extends from about 78' - 300' below LSD at this wellsite (Figure 1). Estimated porosities from core samples in this zone range from about 15% to 35%. From the USGS Paper 2183, Hickey (1982) calculates a T of 2.5 - 3.0 X 10^4 ft^2/d while Spechler (1983) in the GeoTrans "Interim Report 1" estimates the T at 2.2 - 7.4 X 10^4 ft^2/d. Hickey (1980) in the "Interim Report 1" figures the horizontal hydraulic conductivity (K_h) to be 167 ft/d.

Water throughout the Tampa Formation at TR13-1X is considered potable as far as chlorides, sulfates and TDS are concerned. The limit for TDS is 500 mg/l while maximum TDS in the Tampa Formation is about 420 mg/l. Water levels fluctuated during the coring operation from 4.35' to 4.50' below LSD in the Tampa Formation. Generally the water level gradually dropped with increasing depth and decreasing water quality.

The upper Suwannee Formation (bottom of permeable zone A) is characterized by an increase in conductivity, chlorides and TDS above the potable limits. Conductivity tripled from 700 UMHOS (234') to 2200 UMHOS (294'), chlorides rose from 135 mg/l to 600 mg/l while TDS rose from 472 mg/l to 1242 mg/l through the same interval. Sulfates didn't exceed the potable limit until about 400' below LSD. The water level dropped from 4.50' below LSD at the base of the Tampa Formation to 4.75' below LSD at the base of permeable zone A. The water level dropped a total of 0.40' throughout permeable zone A.

The semiconfiner between permeable zones A and B, the Suwannee Semiconfiner, is composed of limestone (calcarenite) and dolomite and extends from approximately 300' - 502' below LSD at the TR13-1X well site. K_v from the "Interim Report 1" by GeoTrans for this semiconfiner is estimated at 1.3×10^{-3} ft/d to 2.5 ft/d (avg. 0.6 ft/d) by Hickey (1980) and 1×10^{-2} ft/d to 1×10^{-3} ft/d by Hickey (1982) from the USGS Water-Supply Paper 2183. Again these values illustrate the probable lateral variability of this semiconfiner. Porosities in this semiconfiner can be as high as 30% but permeabilities are low (Figure 1).

Water quality in the Suwannee Semiconfiner continued to deteriorate with increasing depth. Specific conductivity ranged from 2000 UMHOS at 309' to 32,000 UMHOS at 509' below LSD. Chlorides ranged from 750 mg/l at 309' to 19,250 mg/l at 509' while sulfates increased from 27 mg/l to 2,721 mg/l and total dissolved solids (TDS) ranged from 1580 mg/l to 33,850 mg/l through the same interval. The water level fell from 4.7' at 309' to 12.4' below LSD at 509'. This steady decline in water level was due to increasing water density with depth.

Permeable zone B includes the lower Suwannee Formation and upper Ocala Group. This zone is composed of limestone (predominately calcarenite) and extends from approximately 502' - 590' below LSD. Transmissivity of zone B is estimated at 1.33×10^5 to 9.36×10^5 ft^2/d by Seaburn & Robertson, Inc. (1983) from the "Interim Report 1" by GeoTrans, Appendix B. From the USGS Paper 2183 specific capacity values for zones A and B can be compared. Permeable zone A had a specific capacity of 228 gpm/ft while zone B had an average specific capacity of 13 gpm/ft. Hickey (1982) suggests that T for zone B is relatively lower than that for zone A, based on comparison of the above specific capacities. If the T values presented in this text for zones A and B are accurate, then Hickey's suggestion is in error. The figures indicate that the T value for zone B is approximately one order of magnitude higher than that of zone A. Estimated porosities from core samples in zone B range from 20% to 35% (Figure 1).

Water quality in permeable zone B did not appreciably change from that at the base of the Suwannee Semiconfiner. The water in zone B has an average conductivity of 32,000 UMHOS and can be considered sea water. At 549' below LSD chlorides were 19,875 mg/l, sulfates were 2,781 mg/l, while TDS were 33,600 mg/l. The water level fluctuated but averaged about 12.6' below LSD. Fluctuations in the water level were directly related to the quality of water left in the core rods after pumping, which, in turn, was directly related to the pump rate. Hence, the fluctuating water level more accurately reflects pumping conditions than changes in formation water quality.

The semiconfiner between permeable zones B and C, the Ocala Semiconfiner, was not penetrated in the monitor well but was penetrated in the core hole. This semiconfiner extends from approximately 590' - 698' below LSD and includes the lower 108' of the Ocala Group (Figure 1). This entire semiconfiner is composed of calcarenite with minor amounts of calcilutite and clay. Vertical hydraulic conductivity (K_v) for this zone is estimated at 1.3×10^{-3} ft/d to 2.6 ft/d (avg. 0.6 ft/d) by Hickey (1982) from USGS Water-Supply Paper 2183. Hickey also states that there is "little or no difference between vertical and horizontal hydraulic conductivities in the semiconfining beds," referring to the semiconfiners between permeable zones A and B and between zones B and C. It should be noted that K_v values for this semiconfiner are equivalent to the values for the semiconfiner between zones A and B. Observed core porosities at

this site were as high as 30% but as Hickey (1982) states "the physical nature of the permeability of the semiconfining beds is not completely known." The core samples through this zone indicate possibly high permeabilities but with as much as 10% interstitial clay and clay sized particles. This interstitial clay coupled with a general lack of fractures probably inhibits permeability to a substantial degree. As Hickey (1980) postulates "the primary pores of the rock probably control the permeability of the semiconfining beds."

Water quality and levels in the Ocala Semiconfiner did not appreciably change from those of permeable zone B. As in zone B the water level averaged approximately 12.6' below LSD while condctivity averaged about 30,000 UMHOS. At 649' below LSD chlorides were 20,000 mg/l, sulfates were 2,647 mg/l, while TDS were 36,800 mg/l.

Permeable zone C, as per Hickey (1982) in USGS Paper 2183, "probably comprises the upper part of the Avon Park Limestone and, in places, the lower part of the Ocala Limestone." At TR13-1X this author feels the lower Ocala Group should not be included in permeable zone C. Zone C was only partially penetrated at this site from approximately 698' to 801.5' (TD) below LSD and is composed primarily of yellowish brown dolomite (some fractured), some of which is interbedded with calcarenitic limestone. In the USGS Paper 2183 (1982) Hickey estimated transmissivity (T) values from three pump tests conducted in Pinellas County (in permeable zone C) to be 0.9 X 10^6 to 1.2 X 10^6 ft^2/d. Hickey also used a T value of 1.07 X 10^5 ft^2/d (1977) from Appendix B in the GeoTrans "Interim Report 1". Also from the GeoTrans report Hickey (1980) estimates the horizontal hydraulic conductivity (K_h) to be 1890 ft/d for zone C. From the core at this site estimates of porosity range from 10% - 30% for zone C, however through some of the dolomite strata there was a marked increase in fracturing. Also there were several zones of very friable, sucrosic dolomite. Hickey and Wilson (1982) in the GeoTrans report estimate porosity in the dolomites to be 22%, in the limestones to be 31% with an average porosity of 26% in permeable zone C. Hickey (1982) states, "it appears that the permeability of producing intervals (in zone C) is probably related to numerous small fractures and some small solution channel openings," in the USGS Paper 2183. Coring operations were terminated at TR13-1X in the Avon Park dolomites at 801.5' below LSD when the core rods "jammed" (stopped rotating) and "twisted off" (separated). The Driller and the on-site Hydrologist felt this situation occurred because of the highly fractured nature of the dolomites. This coring problem as well as the recovered core samples support Hickey's contention.

Water quality in permeable zone C fluctuated but did not change significantly from that of the Ocala Semiconfiner. Conductivity varied from 28,000 UMHOS to 36,000 UMHOS, and averaged about 30,000 UMHOS. At 719' below LSD the chlorides were 20,500 mg/l, sulfates were 2,682 and TDS were 35,550 mg/l. Water levels fluctuated between 12.6' and 13.0' below LSD from 709' to 779'. As in permeable zone B, the fluctuations in the above water levels reflect variations in pumping conditions more so than changes in formation water quality. At 779' the water level was 13.0' below LSD and at 794' the water level measured 12.2' below LSD. This 0.8' rise in the water level corresponded to a very thin production zone in the dolomite at 793.5' below LSD. This production zone was composed of fractured, sucrosic dolomite. The persistence of the water level rise could not be verified below 794'. This was due to coring problems and the eventual termination of coring at 801.5' below LSD.

Permeable zone C is used in Pinellas County as an underground injection zone for treated wastewater. As Hickey (1982) emphasizes in the USGS Paper 2183, "potential benefits or hazards to freshwater resources could result from subsurface injection of treated wastewater." With this in mind it was decided to core the Ocala Semiconfiner and a portion of permeable zone C. In order to gather the required information to design monitor wells for this site it was necessary to core to at least 600' below LSD. It was decided that the moderate expense of coring another 200 feet could well be justified considering the potential value of the additional data. Retrieval of these additional cores not only allowed immediate field evaluation of rock type, porosity, gross permeability, accessory constituents, water quality and water levels, but has also made possible more extensive laboratory analysis by outside agencies. Professor of Geology, Anthony Randazzo, of the University of Florida, and his graduate students are now performing technical analysis on approximately the bottom 400' of the TR13-1X core. Some X-Ray defraction, compaction studies and some permeability tests will be run on select sections of this core. This core will be returned before 6-17-86.

V. WELL DESIGN AND CONSTRUCTION

A. Water Table Monitor

A shallow surficial monitor was designed to monitor and record any fluctuations in the water table. Given its location and its sensitivity to changes in precipitation and pumping it is expected the water level will be quite variable. The water level after construction (8-8-85) was 6.81' below LSD.

This well's construction was initiated by drilling a 15 1/4" borehole to 21' below LSD(TD). A 1' section of 6" PVC (20'-21') to serve as a sediment trap was coupled to 10' of 6" PVC (.030" slotted) well screen (10'-20'). 13' of 6" PVC casing was then coupled to the 6" wellscreen (+3'-10'). This left about 3' of 6" PVC casing above LSD. The borehole was then packed with 6-20 type silica sand (3'-21'). The remaining 3' to LSD was filled with neat cement grout. A total of 30 bags of 6-20 type silica sand and 3 bags of cement were used during construction of this well.

B. Intermediate Monitor

The intermediate monitor well was designed to monitor upward migration of saltwater while monitoring a high "T" zone at the base of permeable Zone A (See Fig. 1). The water level measured 3.3' below LSD (8-8-85).

Construction started by drilling a 15 1/4" borehole LSD to 88'. 10" PVC casing was then installed (+3' - 88') and cement grouted to surface. A 10" nominal borehole was then drilled (88'-265'). The monitor tube was then constructed by connecting 1' of 4" PVC casing (264'-265'), used as a sediment trap, to 10' of 4" PVC (.030" slot) well screen (254'-264'). This was coupled to 257' (+3 - 254') of 4" PVC casing and installed in the well. The bottom of the hole (245'-265'), encompassing the screened interval, was then filled with 6-20 type silica sand. The open borehole was then cement grouted (40'-245'). The remaining interval (LSD-40') within the 10" PVC casing will be left open to accommodate the recorder counterweight. A total of 18 bags of 6-20 silica sand, 75 bags of cement and 7 bags of gel were used to construct this well.

C. Deep Floridan and Upper Intermediate Monitors (Dual Zone)

The deep monitor well was designed to monitor head changes in a "production zone" (highly permeable zone) within permeable zone B (Fig. 1) in the lower Suwannee Formation and upper Ocala Group. A second zone, upper intermediate, will monitor the zone of "freshest" water in the Tampa Formation, center of permeable zone A. The water level in the upper intermediate zone (4" PVC) measured 3.24' below LSD while the deep Floridan zone (2" PVC) measured 10.89' below LSD, both taken on 8-8-85.

Construction on this dual zone monitor well was initiated by drilling a 15 1/4" hole (LSD-88'). 10" PVC casing was then set (+3'-88') and cement grouted to the surface (LSD-88'). A 10" nominal borehole was then drilled out from the 10" PVC casing (88'-541'). The deep monitor tube was then installed. It was constructed by coupling a 1' section of 2" PVC casing (540'-541'), used as a sediment trap, to 20' of .030" slot, 2" PVC wellscreen (520'-540'). The wellscreen was then connected to 543' of 2" PVC casing (+3-540') and installed in the well. Silica sand, 6-20 type, was then used to pack the screened interval of the borehole (508'-541'). The borehole was then cement grouted (188'-508'). The upper intermediate tube was then installed. It was constructed by coupling 15' of .030" slot, 4" PVC wellscreen (173'-188') to 176' of 4" PVC casing (+3-173'). The monitored zone (158'-188') was then packed with 6-20 type silica sand. The open borehole was then cement grouted (50'-158') leaving 50' of open hole inside the 10" PVC casing to accommodate the recorder counterweight. A water level recorder will be mounted on the 4" PVC, upper intermediate tube, but not on the 2" PVC deep Floridan tube. A total of 150 bags of cement, 36 bags of 6-20 type silica sand, and 43 bags of gel were used during construction of this dual zone monitor well.

*Note: All three (3) monitor wells are protected above ground with approximately 2.5' of 16" steel casing.

VI. GEOPHYSICAL LOGS

Geophysical logs were run on both the core hole and the deep monitor well with SWFWMD and USGS logging equipment. John Decker operated SWFWMD equipment while Jerry Idler operated the nuclear logging equipment of the USGS from Atlanta. Refer to Table 1 for specifics.

Some of the data obtained directly and through correlation of the above logs are outlined below.

A. Physical Condition of Hole
   1. Diameter of borehole
   2. Rugosity of borehole
B. Lithology
   1. Rock Type
   2. Formational Contacts
C. Porosity
D. Water Quality
   1. Fresh/saltwater interface
   2. Borehole fluid conductivity/resistivity
   3. Formational pore fluid resistivity

LITHOLOGIC WELL LOG PRINTOUT SOURCE - FGS

WELL NUMBER: W- 16181 COUNTY - PINELLAS
TOTAL DEPTH: 801.5 FT. LOCATION: T.29S R.15E S.35AC
144 SAMPLES FROM 86 TO 801 FT. LAT = N 27D 54M 58
LON = W 82D 46M 40
COMPLETION DATE - 04/08/85 ELEVATION - 010 FT
OTHER TYPES OF LOGS AVAILABLE - ELECTRIC, GAMMA-GAMMA, GAMMA, NEUTRON

OWNER/DRILLER: SWFWMD, ROMP TR 13-1X (EAST BAY), DRILLER LLOYD JOHNSON.

WORKED BY: HYDROLOGIST-JIM CLAYTON, CORED 2-18-85 TO 4-08-85
AVERAGE CORE RECOVERY=67.0% - FAIR TO GOOD CORE SAMPLES & RECOVERY
FOUR INCH CASING SET IN 85 FEET - STARTED CORING AT 86 FEET BELOW LSD
CUTTINGS COLLECTED FROM LSD - 85 FEET
TOP OF HAWTHORN FORMATION PICKED AT TOP OF FIRST GAMMA PEAK
NOTE----------THIS WELL IS TOO LONG FOR PROGRAM, THEREFORE
IT HAS BEEN SPLIT INTO TWO SEPARATE FILES, THE FIRST WHICH
CONTAINS 0-404' AND A SECOND THAT CONTAINS 404-801'
THE SECOND FILE IMMEDIATELY FOLLOWS THIS FILE.

0. -	22.	TERRACE SANDS
22. -	~~78.~~ 229	HAWTHORN GROUP
78. -	229.	TAMPA MEMBER OF ARCADIA FM.
229. -	529.	SUWANNEE LIMESTONE
529. -	698.	OCALA GROUP
698. -	.	AVON PARK FM.

0 - 86 NO SAMPLES

86 - 87 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 18% POROSITY, INTERGRANULAR, MOLDIC;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED,
OTHER FEATURES: GRANULAR, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;

87 - 87 CALCILUTITE; YELLOWISH GRAY TO YELLOWISH GRAY; 05% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BRECCIATED,
OTHER FEATURES: CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

87 - 88.8 CALCILUTITE; YELLOWISH GRAY TO YELLOWISH GRAY; 05% POROSITY, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL CAST;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED, MOTTLED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

88.8- 88.8 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 18% POROSITY, INTERGRANULAR, MOLDIC;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;

88.8- 89 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 22% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-02%;
OTHER FEATURES: GRANULAR, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
CORE RUN (86-89') 100% RECOVERY

89 - 91.5 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 22% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;

91.5- 94 CALCILUTITE; VERY LIGHT ORANGE TO WHITE; 10% POROSITY, MOLDIC, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED, BRECCIATED,
ACCESSORY MINERALS: LIMESTONE-02%;
OTHER FEATURES: CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
CORE RUN (89-94') 100% RECOVERY TRACE DUSKY BROWN CHERT LENSE NEAR BOTTOM OF SECTION

94 - 99 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-03%, DOLOMITE-01%;
OTHER FEATURES: CHALKY, GRANULAR, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
SOME FOSSIL VUGS LINED WITH CALCITE, TRACE FORAM (SORITES) CORE RUN (94-99') 100% RECOVERY

99 - 103.6 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCILUTITE-02%, PHOSPHATIC SAND-01%;
OTHER FEATURES: GRANULAR, SUCROSIC, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
TRACE SORITES

103.6- 104 NO SAMPLES
93% RECOVERY

104 - 109 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: SPLINTERY, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
SOME MOLLUSK MOLDS (CHLAMYS); 100% RECOVERY

109 - 113.8 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 22% POROSITY, INTERGRANULAR, MOLDIC;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-02%, CHERT-01%, LIMESTONE-02%;
OTHER FEATURES: SPLINTERY, GRANULAR, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: MOLLUSKS, MILIOLIDS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
TRACE DUSKY BROWN CHERT INFILLING FOSSIL VUGS SOME FOSSIL MOLDS INFILLED WITH TRANSLUCENT
BROWN CALCITE

113.8- 114 NO SAMPLES
98% CORE RECOVERY

114 - 116.8 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 30% POROSITY, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL CAST;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-02%;
OTHER FEATURES: SPLINTERY, CHALKY, MEDIUM RECRYSTALLIZATION;
FOSSILS: CORAL, MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
ABUNDANT CORALLINE MOLDS, TRACE PALE ORANGE CALCITE IN VUGS

116.8- 119 NO SAMPLES
58% CORE RECOVERY (114-119') - DUE TO LOST CIRCULATION

119 - 124 50% CORE RECOVERY

124 - 129 NO SAMPLES
0% CORE RECOVERY

129 - 129.3 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 10% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: CHALKY;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

129.3- 134 NO SAMPLES
5% CORE RECOVERY

134 - 136.5 CALCILUTITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 15% POROSITY, MOLDIC, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: CHALKY;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

136.5- 138.3 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 12% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BRECCIATED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: MUDDY, STROMATAL;
FOSSILS: MOLLUSKS, CORAL;

138.3- 139 NO SAMPLES
85% CORE RECOVERY (134-139')

139 - 144 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 15% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BRECCIATED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR, WEATHERED;
FOSSILS: MOLLUSKS;
100% CORE RECOVERY

144 - 147 CALCILUTITE; VERY LIGHT ORANGE TO WHITE; 17% POROSITY, FRACTURE, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BRECCIATED,
OTHER FEATURES: WEATHERED;
FOSSILS: NO FOSSILS;

147 - 148.5 LIMESTONE; VERY LIGHT ORANGE TO WHITE; 20% POROSITY, MOLDIC, FRACTURE,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-02%, IRON STAIN-01%;
OTHER FEATURES: WEATHERED, GRANULAR, CHALKY;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

148.5- 149 NO SAMPLES
90% CORE RECOVERY

149 - 149 CALCILUTITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 10% POROSITY, FRACTURE, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: ; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BANDED,
ACCESSORY MINERALS: DOLOMITE-04%;
OTHER FEATURES: GREASY, STROMATAL;
FOSSILS: MOLLUSKS;

149 - 151.2 CALCILUTITE; VERY LIGHT ORANGE TO WHITE; 10% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BANDED,
ACCESSORY MINERALS: DOLOMITE-20%;
OTHER FEATURES: STROMATAL;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

151.2- 152.5 CALCILUTITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 10% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-10%;
OTHER FEATURES: CHALKY;
FOSSILS: NO FOSSILS;

152.5- 153.7 CALCILUTITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 10% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, MASSIVE,
ACCESSORY MINERALS: CLAY-02%, CALCITE-01%, DOLOMITE-01%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

153.7- 154 NO SAMPLES
95% CORE RECOVERY

154 - 156 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-01%;
FOSSILS: MOLLUSKS;

156 - 157 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, MOLDIC, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: REEFAL, WEATHERED;
FOSSILS: MOLLUSKS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;

157 - 157.2 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-05%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

157.2- 159 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, MOLDIC, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
100% CORE RECOVERY

159 - 159.5 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

159.5- 159.5 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

159.5- 160.4 LIMESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 12% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED,
OTHER FEATURES: VARIEGATED, VARVED;
FOSSILS: MOLLUSKS, ORGANICS;

160.4- 161 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED,
ACCESSORY MINERALS: CALCITE-01%, DOLOMITE-02%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

161 - 161.5 NO SAMPLES

161.5- 163.5 CALCARENITE; VERY LIGHT ORANGE; 15% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, LAMINATED,
OTHER FEATURES: GRANULAR, VARIEGATED;
FOSSILS: NO FOSSILS;

163.5- 164 NO SAMPLES

80% CORE RECOVERY

164 - 165 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 12% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED,
ACCESSORY MINERALS: CLAY-01%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

165 - 165.7 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
PELECYPOD AND GASTROPOD MOLDS

165.7- 168 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

168 - 168.6 NO SAMPLES

168.6- 169 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, MOTTLED,
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, WORM TRACES;

169 - 170.1 LIMESTONE; VERY LIGHT ORANGE; 18% POROSITY, MOLDIC, FRACTURE, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: LAMINATED, MOTTLED,
OTHER FEATURES: VARVED, WEATHERED;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, WORM TRACES;

170.1- 173.5 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

173.5- 174 NO SAMPLES
90% CORE RECOVERY

174 - 178 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 15% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-04%;
OTHER FEATURES: CHALKY;
FOSSILS: MOLLUSKS;

178 - 179 NO SAMPLES
80% CORE RECOVERY

179 - 181.5 CALCILUTITE; VERY LIGHT GRAY TO LIGHT OLIVE GRAY; 05% POROSITY, FRACTURE, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED, MOTTLED, LAMINATED, BRECCIATED,
ACCESSORY MINERALS: CLAY-10%;
OTHER FEATURES: STROMATAL;
FOSSILS: NO FOSSILS, ORGANICS;

181.5- 183.4 LIMESTONE; VERY LIGHT ORANGE; 10% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-01%;
FOSSILS: MOLLUSKS;

183.4- 183.6 CALCILUTITE; GREENISH GRAY TO LIGHT GRAY; 05% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: NO FOSSILS;

183.6- 184 CALCILUTITE; VERY LIGHT ORANGE; 05% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
100% CORE RECOVERY

184 - 184.9 CALCILUTITE; VERY LIGHT ORANGE; 05% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, MOTTLED,
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

184.9- 185.5 CALCILUTITE; YELLOWISH GRAY; 15% POROSITY, FRACTURE, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

185.5- 186.3 CALCILUTITE; VERY LIGHT ORANGE; 05% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED,
FOSSILS: NO FOSSILS;

186.3- 186.5 CLAY; GRAYISH GREEN TO GRAYISH GREEN; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOLLOWING GAP IN CORE RECOVERY PROBABLY CLAY AS ABOVE

186.5- 188 NO SAMPLES

188 - 189 CALCILUTITE; VERY LIGHT ORANGE; 03% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED, LAMINATED,
FOSSILS: MOLLUSKS;
70% CORE RECOVERY

189 - 191 NO SAMPLES
GAP IN CORE RECOVERY IS PROBABLY GREEN CLAY AS BELOW

191 - 191.5 CLAY; GREENISH GRAY; 01% POROSITY, FRACTURE, LOW PERMEABILITY; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCILUTITE-10%;
FOSSILS: NO FOSSILS;

191.5- 192.5 LIMESTONE; VERY LIGHT ORANGE; 15% POROSITY, INTERGRANULAR, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-01%;
FOSSILS: MOLLUSKS;

192.5- 193.5 NO SAMPLES

193.5- 194 LIMESTONE; VERY LIGHT ORANGE; 15% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
TRACE WHITE LIME MUD; 40% CORE RECOVERY

194 - 196.2 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 15% POROSITY, PIN POINT VUGS, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-02%;
FOSSILS: MOLLUSKS;
GREEN CLAY-FILLED VUGS

196.2- 196.8 CALCILUTITE; VERY LIGHT ORANGE; 20% POROSITY, FRACTURE, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%, CLAY-05%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

196.8- 197 CLAY; GREENISH GRAY; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-30%;
OTHER FEATURES: PLASTIC;
FOSSILS: NO FOSSILS;

197 - 198 CALCILUTITE; VERY LIGHT ORANGE TO GREENISH GRAY; 15% POROSITY, PIN POINT VUGS, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, MASSIVE,
ACCESSORY MINERALS: CLAY-10%;
FOSSILS: NO FOSSILS;
GREEN CLAY-FILLED FRACTURES AND VUGS; 80% RECOVERY

198 - 199 NO SAMPLES

199 - 201.5 CALCILUTITE; VERY LIGHT ORANGE TO GREENISH GRAY; 12% POROSITY, PIN POINT VUGS, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, MASSIVE,
ACCESSORY MINERALS: CLAY-20%;
FOSSILS: NO FOSSILS;

201.5- 204 NO SAMPLES
50% RECOVERY; LIMESTONE INTERVEDDED WITH GREEN CLAY

204 - 204.5 LIMESTONE; VERY LIGHT ORANGE TO GREENISH GRAY; 15% POROSITY, VUGULAR, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
ACCESSORY MINERALS: CLAY-10%;
OTHER FEATURES: VARIEGATED;
FOSSILS: NO FOSSILS;

204.5- 205.1 CLAY; LIGHT OLIVE GRAY TO LIGHT GRAY; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-50%;
OTHER FEATURES: PLASTIC;
FOSSILS: NO FOSSILS;
SAME COMMENT AS 204.0 INTERVAL

205.1- 207.6 NO SAMPLES

207.6- 209 CALCILUTITE; VERY LIGHT ORANGE TO LIGHT GRAY; 10% POROSITY, VUGULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED, BRECCIATED, MOTTLED,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: STROMATAL;
FOSSILS: WORM TRACES;
50% RECOVERY

209 - 209.7 LIMESTONE; ; 15% POROSITY, MOLDIC, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-30%, CALCITE-01%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
SAME COMMENT AS 204.0 INTERVAL

209.7- 209.7 CLAY; GREENISH GRAY; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-70%;
OTHER FEATURES: PLASTIC;
FOSSILS: NO FOSSILS;

209.7- 210.8 CALCILUTITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 05% POROSITY, PIN POINT VUGS,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED,
ACCESSORY MINERALS: CLAY-02%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

210.8- 211.1 CLAY; GRAYISH GREEN; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-10%;
OTHER FEATURES: PLASTIC;
FOSSILS: NO FOSSILS, ORGANICS;

211.1- 212 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, MOLDIC, VUGULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%, CLAY-01%;
FOSSILS: MOLLUSKS, BRACHIOPOD, FOSSIL FRAGMENTS, FOSSIL MOLDS;

212 - 213 NO SAMPLES

213 - 214 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 22% POROSITY, MOLDIC, VUGULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-05%, CALCITE-01%;
FOSSILS: MOLLUSKS, BRACHIOPOD, FOSSIL FRAGMENTS, FOSSIL MOLDS;
80% RECOVERY

214 - 215 NO SAMPLES

215 - 215.2 CLAY; GREENISH GRAY; 05% POROSITY, INTERGRANULAR, LOW PERMEABILITY; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-40%;
OTHER FEATURES: CALCAREOUS, MUDDY;
FOSSILS: NO FOSSILS;

215.2- 216.4 LIMESTONE; VERY LIGHT ORANGE; 20% POROSITY, MOLDIC, FRACTURE, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-02%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

216.4- 216.9 CLAY; GRAYISH GREEN; 05% POROSITY, INTERGRANULAR, LOW PERMEABILITY; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-40%;
OTHER FEATURES: CALCAREOUS, MUDDY;
FOSSILS: NO FOSSILS;

216.9- 217.1 LIMESTONE; VERY LIGHT ORANGE; 20% POROSITY, MOLDIC, FRACTURE, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-01%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

217.1- 217.6 CLAY; GRAYISH GREEN; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-05%;
OTHER FEATURES: CALCAREOUS, PLASTIC;
FOSSILS: NO FOSSILS;

217.6- 218.5 CALCILUTITE; VERY LIGHT ORANGE; 10% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-10%;
OTHER FEATURES: VARIEGATED;
FOSSILS: MOLLUSKS;

218.5- 219 NO SAMPLES
70% RECOVERY

219 - 219.2 CALCILUTITE; VERY LIGHT ORANGE; 10% POROSITY, FRACTURE, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-05%;
FOSSILS: NO FOSSILS;

219.2- 219.5 CLAY; VERY LIGHT ORANGE TO GRAYISH GREEN; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-40%;
OTHER FEATURES: CALCAREOUS, CHALKY;
FOSSILS: NO FOSSILS;

219.5- 219.8 LIMESTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 15% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-10%;
FOSSILS: NO FOSSILS;

219.8- 221.6 CALCILUTITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 10% POROSITY, FRACTURE, INTERCRYSTALLINE,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BRECCIATED,
ACCESSORY MINERALS: CLAY-12%;
OTHER FEATURES: CHALKY, WEATHERED;
FOSSILS: MOLLUSKS;

221.6- 222.5 CALCILUTITE; YELLOWISH GRAY; 15% POROSITY, FRACTURE, INTERCRYSTALLINE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-15%;
OTHER FEATURES: CHALKY, WEATHERED;
FOSSILS: NO FOSSILS;

222.5- 223.7 CALCILUTITE; LIGHT OLIVE GRAY; 10% POROSITY, FRACTURE, INTERCRYSTALLINE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-20%;
OTHER FEATURES: CHALKY, WEATHERED;
FOSSILS: NO FOSSILS;

232 - 234 NO SAMPLES
33% RECOVERY

234 - 235 CALCARENITE; VERY LIGHT GRAY TO VERY LIGHT ORANGE; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

235 - 237 LIMESTONE; VERY LIGHT GRAY TO VERY LIGHT ORANGE; 20% POROSITY, FRACTURE, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: DOLOMITE-01%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

237 - 239 NO SAMPLES
60% RECOVERY FRACTURES WITH EVIDENCE OF WATER MOVEMENT AT 236

239 - 240.5 CALCARENITE; VERY LIGHT ORANGE; 25% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, INTRACLASTS;
RANGE: VERY FINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, BENTHIC FORAMINIFERA, CORAL;
SORITES AT 240.4'

240.5- 242.3 CALCARENITE; VERY LIGHT ORANGE; 35% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, INTRACLASTS;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-03%;
OTHER FEATURES: GRANULAR, REEFAL;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, BENTHIC FORAMINIFERA, CORAL;

223.7- 224 NO SAMPLES
97% RECOVERY

224 - 225 LIMESTONE; WHITE TO VERY LIGHT GRAY; 10% POROSITY, FRACTURE, INTERCRYSTALLINE,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-15%;
OTHER FEATURES: CHALKY, WEATHERED;
FOSSILS: NO FOSSILS;
CLAY AND/OR LIME MUD-FILLED VUGS AND FRACTURES

225 - 225.7 LIMESTONE; WHITE TO VERY LIGHT GRAY; 12% POROSITY, FRACTURE, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-22%;
OTHER FEATURES: CHALKY, WEATHERED, CALCAREOUS;
FOSSILS: NO FOSSILS;

225.7- 229 NO SAMPLES

229 - 229.8 33% RECOVERY

229.8- 229.8 NO SAMPLES

229.8- 230.2 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: NO FOSSILS;

230.2- 230.7 NO SAMPLES

230.7- 232 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 30% POROSITY, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

242.3- 242.5 CALCILUTITE; VERY LIGHT ORANGE; 10% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: NO FOSSILS;

242.5- 244 CALCARENITE; VERY LIGHT ORANGE; 30% POROSITY, MOLDIC, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, BENTHIC FORAMINIFERA;
100% RECOVERY

244 - 244.7 CALCARENITE; VERY LIGHT ORANGE; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR, REEFAL;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, VERTEBRATE;

244.7- 245 LIMESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE; 10% POROSITY, INTERCRYSTALLINE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC;
MODERATE INDURATION;
CEMENT TYPE(S): SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: REEFAL;
FOSSILS: CORAL;
SAMPLE FROM 244.7 TO 245 IS PART OF A CALCIFIED CORAL HEAD

245 - 249 NO SAMPLES
20% RECOVERY

249 - 251.3 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 35% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR, REEFAL;
FOSSILS: MOLLUSKS, CORAL, FOSSIL FRAGMENTS, FOSSIL MOLDS;
ABUNDANT PELECYPODA, GASTROPODA AND CORAL MOLDS AND CASTS

251.3- 254 NO SAMPLES
45% RECOVERY

254 - 256.7 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

256.7- 259 NO SAMPLES
55% CORE RECOVERY

259 - 260 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, FOSSIL FRAGMENTS;

260 - 263.5 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ECHINOID;

263.5- 264 NO SAMPLES
90% RECOVERY; POSSIBLE ECHINOID SPINE AT 263

264 - 267.5 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;

267.5- 269 NO SAMPLES
70% RECOVERY

269 - 273.7 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 22% POROSITY, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR, REEFAL;
FOSSILS: MOLLUSKS, ECHINOID, FOSSIL MOLDS, CORAL;

273.7- 274 NO SAMPLES
92% RECOVERY

274 - 277.3 CALCARENITE; VERY LIGHT GRAY TO VERY LIGHT ORANGE; 18% POROSITY, MOLDIC, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR, REEFAL;
FOSSILS: MOLLUSKS, ECHINOID, CORAL, FOSSIL MOLDS, WORM TRACES;

277.3- 279 NO SAMPLES
65% RECOVERY

279 - 279.5 CALCARENITE; VERY LIGHT GRAY TO VERY LIGHT ORANGE; 15% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, WORM TRACES, FOSSIL MOLDS, CORAL;
TRACE WORM TUBES AND SORITES

279.5- 284 NO SAMPLES
10% RECOVERY

284 - 284.3 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-02%;
OTHER FEATURES: POOR SAMPLE, GRANULAR;
FOSSILS: MOLLUSKS;

284.3- 289 NO SAMPLES
5% RECOVERY

289 - 289.7 CALCARENITE; VERY LIGHT ORANGE; 15% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: POOR SAMPLE, GRANULAR;
FOSSILS: NO FOSSILS;

289.7- 294 NO SAMPLES
15% RECOVERY

294 - 295.5 NO SAMPLES

295.5- 296.7 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS;

296.7- 299 NO SAMPLES
23% RECOVERY

299 - 300.4 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS;

300.4- 302 NO SAMPLES

302 - 302.5 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, INTERGRANULAR, VUGULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS;

302.5- 304 LIMESTONE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, FRACTURE, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-10%;
OTHER FEATURES: CHALKY;
FOSSILS: MOLLUSKS;
65% RECOVERY

304 - 305.3 CALCARENITE; VERY LIGHT ORANGE; 17% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: CHALKY;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS;

305.3- 306.2 CALCILUTITE; VERY LIGHT ORANGE TO LIGHT GRAY; 10% POROSITY, FRACTURE, VUGULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: NO FOSSILS;
SAMPLE POSSIBLY SILICEOUS

306.2- 306.7 LIMESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-02%;
FOSSILS: NO FOSSILS;

306.7- 307.8 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,

307.8- 309 NO SAMPLES
78% RECOVERY

309 - 310.3 CALCARENITE; GRAYISH BROWN TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, WORM TRACES;

310.3- 312 CALCILUTITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 15% POROSITY, FRACTURE, VUGULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: CHALKY;
FOSSILS: MOLLUSKS, WORM TRACES;

312 - 312.6 CALCARENITE; YELLOWISH GRAY TO GRAYISH BROWN; 12% POROSITY, INTERGRANULAR, PIN POINT VUGS, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-10%;
FOSSILS: NO FOSSILS;

312.6- 313.8 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

313.8- 314 NO SAMPLES
95% RECOVERY

314 - 315 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

315 - 315.7 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, PIN POINT VUGS, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

315.7- 317.4 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR,
PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY;
MODERATE INDURATION;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS;

317.4- 318 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR, REEFAL;
FOSSILS: MOLLUSKS, CORAL, FOSSIL MOLDS;

318 - 319 NO SAMPLES
80% RECOVERY

319 - 322 CALCARENITE; GRAYISH BROWN TO LIGHT OLIVE GRAY; 18% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

322 - 324 NO SAMPLES
60% RECOVERY

324 - 325.8 CALCARENITE; GRAYISH BROWN TO LIGHT OLIVE GRAY; 20% POROSITY, INTERGRANULAR, VUGULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS;

325.8- 328.5 NO SAMPLES

328.5- 329 CALCARENITE; GRAYISH BROWN TO LIGHT OLIVE GRAY; 20% POROSITY, INTERGRANULAR, VUGULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS;
45% RECOVERY

329 - 331.7 CALCILUTITE; VERY LIGHT ORANGE; 10% POROSITY, MOLDIC, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, INTRACLASTS;
GRAIN SIZE: CRYPTOCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-02%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, FOSSIL FRAGMENTS;

331.7- 333.4 CALCARENITE; GRAYISH BROWN TO YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-02%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

333.4- 334 NO SAMPLES
88% RECOVERY

334 - 334.5 CALCARENITE; VERY LIGHT ORANGE; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

334.5- 339 NO SAMPLES
10% RECOVERY

339 - 344 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, INTRACLASTS;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
100% RECOVERY; POSSIBLE LEPIDOCYCLINA?

344 - 344.6 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%, CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

344.6- 349 NO SAMPLES
11% RECOVERY

349 - 350 CALCARENITE; VERY LIGHT ORANGE; 20% POROSITY, INTERGRANULAR, VUGULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

350 - 351.4 CALCARENITE; YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: MOLLUSKS;

351.4- 354 NO SAMPLES
48% RECOVERY

354 - 356.9 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

356.9- 359 NO SAMPLES
58% RECOVERY

359 - 361.8 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 22% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

361.8- 362.6 LIMESTONE; VERY LIGHT ORANGE TO GRAYISH BROWN; 08% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, STREAKED,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: VARIEGATED, WEATHERED;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

362.6- 364 CALCARENITE; VERY LIGHT ORANGE; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
100% RECOVERY

364 - 365.2 CALCARENITE; VERY LIGHT ORANGE; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

365.2- 368 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;

368 - 369 NO SAMPLES
80% RECOVERY

369 - 370.5 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-03%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

370.5- 371.8 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

371.8- 374 NO SAMPLES
55% RECOVERY

374 - 375.4 CALCARENITE; VERY LIGHT ORANGE; 18% POROSITY, INTERGRANULAR, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-03%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

375.4- 379 NO SAMPLES
28% RECOVERY

379 - 379.5 CALCARENITE; VERY LIGHT ORANGE; 18% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
ACCESSORY MINERALS: CLAY-03%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

379.5- 384 NO SAMPLES
10% RECOVERY

384 - 384.2 CLAY; MODERATE BLUISH GRAY TO LIGHT OLIVE GRAY; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: CALCAREOUS, PLASTIC, CHALKY, VARIEGATED;
FOSSILS: NO FOSSILS;

384.2- 385.3 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-03%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

385.3- 385.7 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR, CHALKY;
FOSSILS: NO FOSSILS;

385.7- 389 NO SAMPLES
35% RECOVERY

389 - 390.3 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

390.3- 394 NO SAMPLES
25% RECOVERY

394 - 395.3 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

395.3- 395.8 LIMESTONE; LIGHT OLIVE GRAY TO LIGHT GRAY; 15% POROSITY, MOLDIC, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-03%, SILT-10%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ORGANICS;

395.8- 396.1 LIMESTONE; LIGHT OLIVE GRAY TO BLACK; 02% POROSITY, INTERCRYSTALLINE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, ORGANIC MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, LAMINATED, STREAKED,
ACCESSORY MINERALS: SILT-20%, CLAY-03%;
OTHER FEATURES: CALCAREOUS, VARIEGATED, VARVED;
FOSSILS: NO FOSSILS, ORGANICS;

396.1- 396.7 SHALE; BLACK; 05% POROSITY, FRACTURE, LOW PERMEABILITY; GOOD INDURATION;
CEMENT TYPE(S): ORGANIC MATRIX;
SEDIMENTARY STRUCTURES: FISSILE, BEDDED,
OTHER FEATURES: CALCAREOUS;
FOSSILS: NO FOSSILS, ORGANICS;
SHALE IS ACTUALLY BEDDED LIGNITE, SLIGHTLY CALCAREOUS

396.7- 399 NO SAMPLES
53% RECOVERY

399 - 399.6 CLAY; LIGHT OLIVE GRAY TO OLIVE GRAY; NOT OBSERVED; MODERATE INDURATION;
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCILUTITE-20%;
OTHER FEATURES: CALCAREOUS;
FOSSILS: NO FOSSILS, ORGANICS;
SOME LIGNITIC INCLUSIONS

399.6- 400 LIMESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: MOLLUSKS, FOSSIL MOLDS, ECHINOID, ORGANICS;

400 - 403 CALCARENITE; YELLOWISH GRAY TO GRAYISH BROWN; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: MOLLUSKS, CORAL, FOSSIL MOLDS;

403 - 404 NO SAMPLES
80% RECOVERY

404 TOTAL DEPTH

LITHOLOGIC WELL LOG PRINTOUT SOURCE - FGS

WELL NUMBER: W- 16181 COUNTY - PINELLAS
TOTAL DEPTH: 801.5 FT. LOCATION: T.29S R.15E S.35AC
144 SAMPLES FROM 86 TO 801 FT. LAT = N 27D 54M 58
LON = W 82D 46M 40
COMPLETION DATE - 04/08/85 ELEVATION - 010 FT
OTHER TYPES OF LOGS AVAILABLE - ELECTRIC, GAMMA-GAMMA, GAMMA, NEUTRON

OWNER/DRILLER: SWFWMD, ROMP TR 13-1X (EAST BAY), DRILLER LLOYD JOHNSON.

WORKED BY: HYDROLOGIST-JIM CLAYTON, CORED 2-18-85 TO 4-08-85
AVERAGE CORE RECOVERY=67.0% - FAIR TO GOOD CORE SAMPLES & RECOVERY
FOUR INCH CASING SET IN 85 FEET - STARTED CORING AT 86 FEET BELOW LSD
CUTTINGD COLLECTED FROM LSD - 85 FEET
TOP OF HAWTHORN FORMATION PICKED AT TOP OF FIRST GAMMA PEAK
NOTE----------THIS WELL IS TOO LONG FOR PROGRAM, THEREFORE
IT HAS BEEN SPLIT INTO TWO SEPARATE FILES, THE FIRST WHICH
CONTAINS 0-404' AND A SECOND THAT CONTAINS 404-801'
IGNORE 0-404' IN THIS FILE, BUT REFER TO FIRST FILE.

0.	- 22.	TERRACE SANDS
22.	- 78.	HAWTHORN GROUP
78.	- 229.	TAMPA MEMBER OF ARCADIA FM.
229.	- 529.	SUWANNEE LIMESTONE
529.	- 698.	OCALA GROUP
698.	- .	AVON PARK FM.

0 - 404 NO SAMPLES

404 - 405.5 CALCARENITE; YELLOWISH GRAY TO GRAYISH BROWN; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-10%;
OTHER FEATURES: GRANULAR, CHALKY, SPECKLED;
FOSSILS: MOLLUSKS, ORGANICS;

405.5- 407.5 SILT; LIGHT OLIVE GRAY TO DARK YELLOWISH BROWN; 05% POROSITY, INTERGRANULAR,
FRACTURE, LOW PERMEABILITY; MODERATE INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-15%;
OTHER FEATURES: CHALKY, CALCAREOUS, SPECKLED, WEATHERED, VARVED;
FOSSILS: NO FOSSILS, ORGANICS;
SILTSTONE % CLAY INCREASING WITH DEPTH - TRACE LIGNITE

407.5- 408.8 SILT; LIGHT OLIVE GRAY TO DARK YELLOWISH BROWN; 05% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY; MODERATE INDURATION;
CEMENT TYPE(S): CLAY MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: CLAY-20%;
OTHER FEATURES: CHALKY, CALCAREOUS, WEATHERED, VARVED;
FOSSILS: NO FOSSILS, ORGANICS;

408.8- 409 NO SAMPLES
98% RECOVERY

409 - 410 CALCARENITE; LIGHT OLIVE GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-05%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, ORGANICS;

410 - 411.2 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, ORGANICS;

411.2- 414 NO SAMPLES
45% RECOVERY

414 - 414.8 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, WORM TRACES, CONES;

414.8- 419 NO SAMPLES
15% RECOVERY; TRACE DICTYOCONUS

419 - 419.4 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, CONES, WORM TRACES;

419.4- 419.7 LIMESTONE; VERY LIGHT ORANGE; 10% POROSITY, INTERCRYSTALLINE, VUGULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CLAY-05%;
FOSSILS: MOLLUSKS, FOSSIL MOLDS, FOSSIL FRAGMENTS;

419.7- 424 NO SAMPLES
15% RECOVERY

424 - 425.7 CALCARENITE; VERY LIGHT ORANGE; 30% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, ECHINOID, CONES, FOSSIL MOLDS;
SOME DICTYOCONUS COOKEI (CONES)

425.7- 429 NO SAMPLES
35% RECOVERY

429 - 432.5 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, CONES, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;

432.5- 434 NO SAMPLES
70% RECOVERY

434 - 434.6 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, CONES, FOSSIL FRAGMENTS, FOSSIL MOLDS, ECHINOID;

434.6- 436.3 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, CONES, FOSSIL FRAGMENTS, FOSSIL MOLDS, MILIOLIDS;

436.3- 439 NO SAMPLES
45% RECOVERY

439 - 440.8 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ORGANICS, CONES;

440.8- 441.5 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, CONES;

441.5- 444 NO SAMPLES
50% RECOVERY

444 - 444.7 CALCARENITE; VERY LIGHT ORANGE; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, MILIOLIDS;

444.7- 449 NO SAMPLES
15% RECOVERY

449 - 451 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 25% POROSITY, INTERGRANULAR,
MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, ECHINOID, FOSSIL MOLDS, MOLLUSKS, ORGANICS;

451 - 454 NO SAMPLES
40% RECOVERY

454 - 455.2 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 72% POROSITY, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; POOR INDURATION;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, ECHINOID, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

455.2- 459 NO SAMPLES
23% RECOVERY

459 - 460.4 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, MOLLUSKS, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;
LARGE ECHINOID (CASSIDULUS GOULDII)

460.4- 464 NO SAMPLES
28% RECOVERY

464 - 465.5 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-02%;
OTHER FEATURES: GRANULAR, COQUINA, REEFAL;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, CORAL;

465.5- 468.8 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

468.8- 469 NO SAMPLES
95% RECOVERY

469 - 471.6 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 30% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR, COQUINA;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

471.6- 474 NO SAMPLES
52% RECOVERY

474 - 477.9 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 25% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ORGANICS;

477.9- 479 NO SAMPLES
78% RECOVERY

479 - 479.5 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 20% POROSITY, MOLDIC, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ORGANICS;

479.5- 481.7 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 12% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, STREAKED, BIOTURBATED,
OTHER FEATURES: VARIEGATED;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ORGANICS;

481.7- 484 NO SAMPLES
55% RECOVERY

484 - 484.6 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
FOSSILS: MOLLUSKS;

484.6- 485.8 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
FOSSILS: MOLLUSKS;

485.8- 486.1 LIMESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: DOLOMITE-02%, CLAY-03%;
OTHER FEATURES: DOLOMITIC;
FOSSILS: MOLLUSKS, ORGANICS;

486.1- 486.6 DOLOSTONE; LIGHT OLIVE GRAY TO LIGHT OLIVE GRAY; 10% POROSITY, INTERCRYSTALLINE,
LOW PERMEABILITY; 0-10% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCILUTITE-05%;
OTHER FEATURES: VARIEGATED, WEATHERED, CALCAREOUS;
FOSSILS: ORGANICS;

486.6- 487.1 NO SAMPLES

487.1- 489 DOLOSTONE; LIGHT OLIVE GRAY TO LIGHT OLIVE GRAY; 10% POROSITY, PIN POINT VUGS,
INTERCRYSTALLINE, LOW PERMEABILITY; 0-10% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: CALCAREOUS;
FOSSILS: NO FOSSILS, ORGANICS;
90% RECOVERY

489 - 494 DOLOSTONE; LIGHT OLIVE GRAY TO MODERATE YELLOWISH BROWN; 06% POROSITY, FRACTURE,
PIN POINT VUGS, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED, STREAKED, MASSIVE,
ACCESSORY MINERALS: CALCILUTITE-08%;
OTHER FEATURES: CALCAREOUS, SPECKLED;
FOSSILS: MOLLUSKS, ORGANICS;
100% RECOVERY

494 - 494.7 DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE GRAY; 08% POROSITY,
PIN POINT VUGS, INTERCRYSTALLINE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED, STREAKED, MASSIVE,
OTHER FEATURES: CALCAREOUS, SUCROSIC;
FOSSILS: ORGANICS;

494.7- 495.1 DOLOSTONE; DARK GRAYISH YELLOW TO VERY LIGHT ORANGE; 05% POROSITY,
INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
SEDIMENTARY STRUCTURES: INTERBEDDED, CROSS-BEDDED,
ACCESSORY MINERALS: CALCILUTITE-25%;
OTHER FEATURES: CALCAREOUS, SUCROSIC, WEATHERED, VARIEGATED;
FOSSILS: NO FOSSILS, ORGANICS;

495.1- 496 CALCARENITE; VERY LIGHT ORANGE; 10% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: DOLOMITE-02%, CLAY-02%;
OTHER FEATURES: CHALKY, SPECKLED;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

496 - 497 CALCARENITE; VERY LIGHT ORANGE; 18% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
FOSSILS: MOLLUSKS, FOSSIL MOLDS, FOSSIL FRAGMENTS;

497 - 497.9 CALCARENITE; YELLOWISH GRAY; 10% POROSITY, INTERGRANULAR, VUGULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: DOLOMITE-02%, PHOSPHATIC SAND-02%;
OTHER FEATURES: CHALKY, SPECKLED;
FOSSILS: MOLLUSKS, FOSSIL MOLDS;

497.9- 499 NO SAMPLES
78% RECOVERY

499 - 501 CALCARENITE; VERY LIGHT ORANGE; 15% POROSITY, INTERGRANULAR, PIN POINT VUGS, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: MOLLUSKS;

501 - 501.7 CALCARENITE; YELLOWISH GRAY; 10% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CLAY-25%, CALCITE-01%;
FOSSILS: NO FOSSILS, ORGANICS;

501.7- 501.8 CLAY; MODERATE GRAY TO DARK GRAY; NOT OBSERVED; POOR INDURATION;
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: LIMESTONE-75%;
OTHER FEATURES: PLASTIC;
FOSSILS: NO FOSSILS, ORGANICS;
ALTERNATING LAYERS OF CALCARENITE AND CLAY

501.8- 502.7 CALCARENITE; YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: COQUINA, GRANULAR;
FOSSILS: MOLLUSKS, CRUSTACEA, FOSSIL FRAGMENTS, FOSSIL MOLDS;

502.7- 504 NO SAMPLES
75% RECOVERY

504 - 505 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR, COQUINA;
FOSSILS: MOLLUSKS, ECHINOID, CRUSTACEA, FOSSIL FRAGMENTS, FOSSIL MOLDS;

505 - 506 CALCARENITE; LIGHT GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR, COQUINA;
FOSSILS: MOLLUSKS, ECHINOID, CRUSTACEA, FOSSIL FRAGMENTS, FOSSIL MOLDS;

506 - 509 NO SAMPLES
40% RECOVERY

509 - 513.2 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 20% POROSITY, INTERGRANULAR,
MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BRACHIOPOD, FOSSIL MOLDS;

513.2- 514 NO SAMPLES
83% RECOVERY

514 - 516.5 CALCARENITE; VERY LIGHT ORANGE; 20% POROSITY, INTERGRANULAR, VUGULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: NO FOSSILS;

516.5- 517.9 CALCARENITE; LIGHT GRAY TO YELLOWISH GRAY; 30% POROSITY, MOLDIC, INTERGRANULAR,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

517.9- 519 NO SAMPLES
78% RECOVERY

519 - 521.4 CALCARENITE; VERY LIGHT ORANGE; 20% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, ECHINOID;
TRACE CRAB CLAW

521.4- 521.7 CALCARENITE; VERY LIGHT GRAY TO VERY LIGHT ORANGE; 30% POROSITY, MOLDIC,
INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, INTRACLASTS;
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

521.7- 524 NO SAMPLES
54% RECOVERY

524 - 525.5 CALCARENITE; VERY LIGHT ORANGE TO VERY LIGHT GRAY; 25% POROSITY, MOLDIC,
INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: FINE TO COARSE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ECHINOID;

525.5- 525.7 LIMESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 18% POROSITY, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

525.7- 529 NO SAMPLES
34% RECOVERY

529 - 531.8 TRACE CRAB FRAGMENTS

531.8- 534 NO SAMPLES
55% RECOVERY

534 - 535.5 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, PIN POINT VUGS,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;

535.5- 539 NO SAMPLES
30% RECOVERY

539 - 542.7 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, PIN POINT VUGS,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: MOLLUSKS, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;

542.7- 544 NO SAMPLES
75% RECOVERY

544 - 547.4 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
OCCASIONAL NUMMULITES VANDERSTOKI? (OPERCULINOIDES?)

547.4- 549 NO SAMPLES
78% RECOVERY

549 - 551.9 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
ABUNDANT FORAMS AS ABOVE

551.9- 554 NO SAMPLES
58% RECOVERY

554 - 556.7 CALCARENITE; YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS;
NUMMULITES VANDERSTOKI OR OPERCULINOIDES MOODYBRANCHENSIS

556.7- 559 NO SAMPLES
55% RECOVERY

559 - 562 CALCARENITE; YELLOWISH GRAY; 22% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-02%;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
ABUNDANT FORAMS AS ABOVE

562 - 563.7 CALCARENITE; YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS;
DRASTIC DECREASE IN FORAM ABUNDANCE; TRACE LEPIDOCYCLINA

563.7- 564 NO SAMPLES
95% RECOVERY

564 - 567.5 CALCARENITE; YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS;

567.5- 569 NO SAMPLES
70% RECOVERY

569 - 572 CALCARENITE; YELLOWISH GRAY; 12% POROSITY, INTERGRANULAR, PIN POINT VUGS, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA;
TRACE OPERCULINOIDES AS ABOVE

572 - 574 NO SAMPLES
60% RECOVERY

574 - 578 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

578 - 579 NO SAMPLES
80% RECOVERY

579 - 582 CALCARENITE; YELLOWISH GRAY; 18% POROSITY, INTERGRANULAR, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS;

582 - 583.7 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 30% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-02%;
FOSSILS: MOLLUSKS, ECHINOID, BRACHIOPOD, FOSSIL FRAGMENTS, FOSSIL MOLDS;
OCCASIONAL ECHINOID (PERIARCHUS LYELLI FLORIDANUS)

583.7- 584 NO SAMPLES
95% RECOVERY

584 - 585.5 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 35% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: FINE TO COARSE; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-02%;
FOSSILS: MOLLUSKS, ECHINOID, BRACHIOPOD, WORM TRACES, FOSSIL MOLDS;

585.5- 589 NO SAMPLES
30% RECOVERY

589 - 590.2 CALCARENITE; YELLOWISH GRAY; 30% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCITE-01%, CALCILUTITE-10%;
FOSSILS: ECHINOID, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, BENTHIC FORAMINIFERA;
ABUNDANT ECHINOIDS

590.2- 593 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 20% POROSITY, FRACTURE, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: ECHINOID, BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS;
OCCASIONAL OPERCULINOIDES MOODYBRANCHENSIS

593 - 594 NO SAMPLES
80% RECOVERY

594 - 595.5 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC, FRACTURE;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCILUTITE-05%;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
SAME AS 593' INTERVAL

595.5- 599 NO SAMPLES
30% CORE RECOVERY

599 - 603 CALCARENITE; YELLOWISH GRAY; 17% POROSITY, INTERGRANULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCILUTITE-10%;
FOSSILS: BENTHIC FORAMINIFERA, WORM TRACES, FOSSIL FRAGMENTS;

603 - 604 NO SAMPLES
80% RECOVERY

604 - 607.5 CALCARENITE; YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCILUTITE-10%;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS;
ABUNDANT OPERCULINOIDES AS ABOVE

607.5- 609 NO SAMPLES
70% RECOVERY

609 - 613.5 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, FOSSIL FRAGMENTS, FOSSIL MOLDS,
MOLLUSKS;

613.5- 614 NO SAMPLES
90% RECOVERY

614 - 616.5 CALCARENITE; YELLOWISH GRAY; 18% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: BENTHIC FORAMINIFERA, ECHINOID, MOLLUSKS, FOSSIL FRAGMENTS,
FOSSIL MOLDS;

616.5- 619 50% RECOVERY

619 - 623.5 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED,
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, WORM TRACES;

623.5- 624 NO SAMPLES
90% RECOVERY

624 - 625.7 CALCARENITE; YELLOWISH GRAY; 17% POROSITY, INTERGRANULAR, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCILUTITE-02%;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, WORM TRACES, FOSSIL FRAGMENTS, FOSSIL MOLDS;

625.7- 628.6 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 30% POROSITY, MOLDIC, INTERGRANULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, SKELETAL, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED,
ACCESSORY MINERALS: CALCILUTITE-02%;
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, WORM TRACES, FOSSIL FRAGMENTS, FOSSIL MOLDS;
LARGE CLAM SHELL MOLDS, OPERCULINOIDES, LEPIDOCYCLINA

628.6- 629 NO SAMPLES
90% RECOVERY

629 - 631.4 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, WORM TRACES, FOSSIL FRAGMENTS, FOSSIL MOLDS;

631.4- 634 NO SAMPLES
48% RECOVERY

634 - 635 CALCARENITE; YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, WORM TRACES, FOSSIL FRAGMENTS,
FOSSIL MOLDS;

635 - 638 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, PIN POINT VUGS,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, WORM TRACES,
FOSSIL MOLDS;
OPERCULINOIDES

638 - 639 NO SAMPLES
80% RECOVERY

639 - 644 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 25% POROSITY, INTERGRANULAR,
PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, FOSSIL MOLDS,
MILIOLIDS;

644 - 645.2 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, MILIOLIDS, FOSSIL FRAGMENTS, MILIOLIDS;

645.2- 646.5 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, INTRACLASTS, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
ABUNDANT PELECYPOD MOLDS

646.5- 648.3 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

648.3- 649 NO SAMPLES
85% RECOVERY

649 - 654 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 25% POROSITY, INTERGRANULAR, VUGULAR, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL MOLDS, BARNACLES;
SOME FAIRLY LARGE SOLUTION CHANNELS; ABUNDANT MOLLUSK MOLDS 100% RECOVERY

654 - 659 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 25% POROSITY, MOLDIC, FRACTURE, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;
TRACE FORAM (GYPSINA GLOBULA)

659 - 660.4 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 10% POROSITY, MOLDIC,
PIN POINT VUGS, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

660.4- 664 CALCARENITE; YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MEDIUM; RANGE: FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCILUTITE-05%, CLAY-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, MILIOLIDS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

664 - 666.2 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 25% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE; POOR INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-01%, CALCILUTITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, WORM TRACES, FOSSIL FRAGMENTS;

666.2- 669 NO SAMPLES
45% RECOVERY

669 - 672.2 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CLAY-01%, CALCILUTITE-02%, CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

672.2- 674 NO SAMPLES
75% RECOVERY

674 - 676.3 CALCARENITE; YELLOWISH GRAY TO LIGHT GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCILUTITE-02%, CALCITE-01%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

676.3- 679 NO SAMPLES
45% RECOVERY

679 - 684 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: CALCILUTITE-01%, CALCITE-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

684 - 689 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: GRANULAR;
FOSSILS: MILIOLIDS, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

689 - 693.3 CALCARENITE; YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-05%, CALCILUTITE-10%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ORGANICS;

693.3- 694 NO SAMPLES
85% RECOVERY

694 - 696.5 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-03%, CALCILUTITE-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, BARNACLES, FOSSIL FRAGMENTS, FOSSIL MOLDS;

696.5- 697.1 LIMESTONE; YELLOWISH GRAY; 10% POROSITY, INTERCRYSTALLINE, FRACTURE,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-02%;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

697.1- 697.3 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCITE-05%, CALCILUTITE-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS;

697.3- 699 NO SAMPLES
70% RECOVERY

699 - 700.6 CALCARENITE; YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC,
POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: ECHINOID, MOLLUSKS, FOSSIL MOLDS, FOSSIL FRAGMENTS;

700.6- 702.6 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 17% POROSITY, INTERGRANULAR, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCITE-02%;
OTHER FEATURES: GRANULAR;
FOSSILS: ECHINOID, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, ORGANICS;

702.6- 703.7 CALCARENITE; YELLOWISH GRAY; 30% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: DOLOMITE-02%, CALCITE-04%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, ECHINOID, CORAL, FOSSIL FRAGMENTS, ORGANICS;
ABUNDANT ECHINOIDS (PERIARCHUS LYELLI FLORIDANUS?)

703.7- 704 NO SAMPLES
93% RECOVERY

704 - 706.8 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE; 25% POROSITY, INTERGRANULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY;
GRAIN TYPE: BIOGENIC, CALCILUTITE;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING, BIOTURBATED,
ACCESSORY MINERALS: DOLOMITE-01%, CALCILUTITE-10%;
OTHER FEATURES: GRANULAR;
FOSSILS: MOLLUSKS, ECHINOID, CORAL, FOSSIL FRAGMENTS, ORGANICS;

706.8- 708.7 DOLOSTONE; DARK YELLOWISH BROWN; 30% POROSITY, VUGULAR, INTERCRYSTALLINE, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCILUTITE-05%;
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, FOSSIL FRAGMENTS, ORGANICS;

708.7- 709 NO SAMPLES
95% RECOVERY

709 - 711.6 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE YELLOWISH BROWN; 20% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, FOSSIL FRAGMENTS, ORGANICS;

711.6- 713.2 NO SAMPLES
GAP IN CORE PROBABLY DUE TO LOST PERMEABLE SUCROSIC DOLOMITE

713.2- 714 DOLOSTONE; DARK YELLOWISH BROWN TO BLACK; 15% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ORGANICS, PLANT REMAINS;
68% RECOVERY

714 - 718.3 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE BROWN; 10% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ORGANICS;

718.3- 719 NO SAMPLES
85% RECOVERY

719 - 721 DOLOSTONE; DARK BROWN TO MODERATE YELLOWISH BROWN; 20% POROSITY, FRACTURE, INTERCRYSTALLINE, POSSIBLY HIGH PERMEABILITY; 50-90% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ORGANICS;
ALTERNATING SOFT AND HARD SUCROSIC LEDGES

721 - 724 NO SAMPLES
40% RECOVERY INCREASED FRACTURING PRESENT

724 - 724.8 DOLOSTONE; GRAYISH BROWN TO DARK YELLOWISH BROWN; 10% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ORGANICS, NO FOSSILS;

724.8- 726.4 DOLOSTONE; MODERATE YELLOWISH BROWN TO DARK YELLOWISH BROWN; 25% POROSITY, INTERCRYSTALLINE, VUGULAR, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, FOSSIL FRAGMENTS, ORGANICS;

726.4- 729 NO SAMPLES
60% RECOVERY

729 - 729.5 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE YELLOWISH BROWN; 17% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS;

729.5- 733.7 LIMESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY; 10% POROSITY, FRACTURE, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: MICROCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: DOLOMITE-10%;
OTHER FEATURES: DOLOMITIC;
FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS;
SOME THIN INTERBEDDED DOLOMITIC LENSES

733.7- 734 NO SAMPLES
95% RECOVERY

734 - 735 DOLOSTONE; GRAYISH BROWN; 10% POROSITY, FRACTURE, VUGULAR,
LOW PERMEABILITY; 0-10% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: CALCILUTITE-10%;
OTHER FEATURES: CALCAREOUS;
FOSSILS: ECHINOID, ORGANICS;

735 - 736.2 LIMESTONE; VERY LIGHT ORANGE; 15% POROSITY, FRACTURE, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED,
OTHER FEATURES: REEFAL;
FOSSILS: CORAL, MOLLUSKS, FOSSIL FRAGMENTS;

736.2- 739 NO SAMPLES
45% RECOVERY

739 - 741.1 LIMESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 20% POROSITY, INTERGRANULAR,
MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED, BIOTURBATED,
ACCESSORY MINERALS: DOLOMITE-02%;
OTHER FEATURES: DOLOMITIC;
FOSSILS: ECHINOID, MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, CORAL;
ABUNDANT ECHINOIDS (PERONELLA DALLI?)

741.1- 741.3 DOLOSTONE; GRAYISH BROWN TO YELLOWISH GRAY; 12% POROSITY, PIN POINT VUGS,
INTERCRYSTALLINE, LOW PERMEABILITY; 0-10% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCILUTITE-10%;
OTHER FEATURES: CALCAREOUS;
FOSSILS: ECHINOID, FOSSIL MOLDS;

741.3- 741.7 DOLOSTONE; GRAYISH BROWN TO MODERATE YELLOWISH BROWN; 30% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: NO FOSSILS;

741.7- 742.3 DOLOSTONE; GRAYISH BROWN TO MODERATE YELLOWISH BROWN; 10% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

742.3- 742.5 NO SAMPLES

742.5- 744 DOLOSTONE; GRAYISH BROWN; 10% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, ORGANICS;

744 - 747 DOLOSTONE; GRAYISH BROWN; 10% POROSITY, INTERCRYSTALLINE, VUGULAR, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
FOSSILS: ECHINOID, ORGANICS;

747 - 747.8 NO SAMPLES
MISSING CORE PROBABLY WAS SUCROSIC SOLOMITE

747.8- 748 DOLOSTONE; MODERATE YELLOWISH BROWN; 30% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, ORGANICS;

748 - 749 DOLOSTONE; GRAYISH BROWN TO DARK YELLOWISH BROWN; 12% POROSITY, FRACTURE, INTERCRYSTALLINE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, ORGANICS;
85% RECOVERY

749 - 750.3 DOLOSTONE; DARK YELLOWISH BROWN; 10% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: PLANT REMAINS-01%;
FOSSILS: ECHINOID, ORGANICS;

750.3- 751 NO SAMPLES

751 - 752 DOLOSTONE; DARK YELLOWISH BROWN; 15% POROSITY, MOLDIC, INTERCRYSTALLINE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: ECHINOID;

752 - 752.5 NO SAMPLES
CORE GAPS PROBABLY FRIABLE SUCROSIC DOLOMITE

752.5- 752.6 DOLOSTONE; DARK YELLOWISH BROWN; 30% POROSITY, VUGULAR, INTERCRYSTALLINE, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: NO FOSSILS;

752.6- 754 DOLOSTONE; DARK YELLOWISH BROWN; 15% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS, LOW PERMEABILITY; 10-50% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, ORGANICS;
78% RECOVERY

754 - 756 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE YELLOWISH BROWN; 10% POROSITY, FRACTURE, INTERCRYSTALLINE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL; GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE; GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

756 - 756.2 DOLOSTONE; DARK YELLOWISH BROWN; 20% POROSITY, INTERCRYSTALLINE, VUGULAR, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

756.2- 756.7 NO SAMPLES

756.7- 757.5 DOLOSTONE; DARK YELLOWISH BROWN TO MODERATE YELLOWISH BROWN; 20% POROSITY, INTERCRYSTALLINE, VUGULAR, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

757.5- 759 NO SAMPLES
65% RECOVERY

759 - 761 DOLOSTONE; MODERATE YELLOWISH BROWN; 20% POROSITY, VUGULAR, INTERCRYSTALLINE, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

761 - 764 NO SAMPLES
MISSING THREE FEET, PROBABLY CALCARENITE AS DESCRIBED BELOW 40% RECOVERY

764 - 765 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 12% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; MODERATE INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: DOLOMITE-10%;
OTHER FEATURES: DOLOMITIC, GRANULAR;
FOSSILS: MILIOLIDS;

765 - 766 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 25% POROSITY, INTERGRANULAR, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: INTERBEDDED,
ACCESSORY MINERALS: DOLOMITE-10%;
OTHER FEATURES: DOLOMITIC, GRANULAR;
FOSSILS: MOLLUSKS, MILIOLIDS, ECHINOID, FOSSIL MOLDS;

766 - 768.6 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 15% POROSITY, INTERGRANULAR, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: DOLOMITE-10%;
OTHER FEATURES: DOLOMITIC, GRANULAR;
FOSSILS: MOLLUSKS, MILIOLIDS, ECHINOID, FOSSIL MOLDS;

768.6- 769 NO SAMPLES
92% RECOVERY

769 - 774 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 17% POROSITY, INTERGRANULAR, MOLDIC, LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE, BIOGENIC;
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: BEDDED,
ACCESSORY MINERALS: DOLOMITE-02%;
OTHER FEATURES: DOLOMITIC, GRANULAR;
FOSSILS: ECHINOID, MOLLUSKS, ORGANICS, FOSSIL MOLDS, FOSSIL FRAGMENTS;

774 - 776.2 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY; 10% POROSITY, INTERGRANULAR,
LOW PERMEABILITY;
GRAIN TYPE: CALCILUTITE;
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO FINE; GOOD INDURATION;
CEMENT TYPE(S): CALCILUTITE MATRIX;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: DOLOMITE-02%;
OTHER FEATURES: DOLOMITIC, GRANULAR;
FOSSILS: ECHINOID, MOLLUSKS, FOSSIL MOLDS, FOSSIL FRAGMENTS;
INCREASINGLY DOLOMITIC AT 776'

776.2- 778.3 DOLOSTONE; MODERATE YELLOWISH BROWN TO DARK YELLOWISH BROWN; 20% POROSITY,
INTERCRYSTALLINE, VUGULAR, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: GRADED BEDDING,
ACCESSORY MINERALS: CALCILUTITE-02%;
OTHER FEATURES: CALCAREOUS, SUCROSIC;
FOSSILS: ECHINOID, FOSSIL MOLDS, ORGANICS;
DECREASINGLY CALCAREOUS FROM 766-777

778.3- 779 NO SAMPLES
87% RECOVERY

779 - 783.5 DOLOSTONE; MODERATE YELLOWISH BROWN; 25% POROSITY, INTERCRYSTALLINE, VUGULAR,
POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED, STREAKED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, FOSSIL MOLDS;
NUMEROUS ECHINOIDS

783.5- 784 NO SAMPLES
90% RECOVERY

784 - 785.4 DOLOSTONE; MODERATE YELLOWISH BROWN; 25% POROSITY, VUGULAR, INTERCRYSTALLINE,
POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, FOSSIL MOLDS;

785.4- 788.8 DOLOSTONE; MODERATE YELLOWISH BROWN; 25% POROSITY, INTERCRYSTALLINE, VUGULAR,
POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: FOSSIL MOLDS, ECHINOID;

788.8- 789 NO SAMPLES
95% RECOVERY

789 - 790.7 DOLOSTONE; MODERATE YELLOWISH BROWN; 25% POROSITY, INTERCRYSTALLINE, VUGULAR,
POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, FOSSIL MOLDS;

790.7- 792.2 NO SAMPLES

792.2- 794 DOLOSTONE; LIGHT OLIVE GRAY; 10% POROSITY, FRACTURE,
LOW PERMEABILITY; 10-50% ALTERED; ANHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
FOSSILS: ORGANICS;
72% RECOVERY

794 - 796 DOLOSTONE; DARK YELLOWISH BROWN; 15% POROSITY, INTERCRYSTALLINE, PIN POINT VUGS,
LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED, MASSIVE,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

796 - 796.2 DOLOSTONE; MODERATE YELLOWISH BROWN; 30% POROSITY, INTERCRYSTALLINE,
PIN POINT VUGS, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC, MUDDY;
FOSSILS: NO FOSSILS;

796.2- 798.2 DOLOSTONE; GRAYISH BROWN TO DARK YELLOWISH BROWN; 15% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO MICROCRYSTALLINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID, MOLLUSKS;

798.2- 799 NO SAMPLES
83% RECOVERY

799 - 799.2 DOLOSTONE; MODERATE YELLOWISH BROWN; 25% POROSITY, FRACTURE, INTERCRYSTALLINE, POSSIBLY HIGH PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: INTERBEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: NO FOSSILS;

799.2- 801 DOLOSTONE; DARK YELLOWISH BROWN TO DARK YELLOWISH BROWN; 15% POROSITY, INTERCRYSTALLINE, FRACTURE, LOW PERMEABILITY; 10-50% ALTERED; SUBHEDRAL;
GRAIN SIZE: MICROCRYSTALLINE; RANGE: CRYPTOCRYSTALLINE TO VERY FINE;
GOOD INDURATION;
CEMENT TYPE(S): DOLOMITE CEMENT;
SEDIMENTARY STRUCTURES: BEDDED,
OTHER FEATURES: SUCROSIC;
FOSSILS: ECHINOID;

801 - 801.5 NO SAMPLES
80% RECOVERY

801.5 TOTAL DEPTH