APPENDIX 3-1 GEOLOGIST'S LITHOLOGIC LOGS

Depth 0-10	<u>Lithology</u> Sand, dark yellowish brown (10YR 4/2), unconsolidated, good apparent permeability and porosity, fine quartz, trace organics
10-20	Marl, pale greenish yellow (10Y 8/2), moderately stiff, low apparent permeability and porosity, minor shell
20-30	Clay, greenish gray (5GY 8/1), soft, fine phosphate, abundant marl as above
30-40	Clay, greenish gray (5GY 8/1), soft, fine to pebble phosphate, minor yellowish gray (5Y 8/1) phosphatic limestone, trace coarse to pebble quartz
40-55	Clayey sand, greenish gray (5GY 8/1), medium to pebble quartz, medium to coarse phosphate, increasing clay with depth, common shell
55-65	Sandy clay, greenish gray (5GY 8/1), very soft, fine to medium phosphate, common clayey sand as above
65-75	Sand and shell, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), medium to coarse quartz, minor fine phosphate
75-85	Sand and shell, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), medium to coarse quartz, minor fine phosphate, minor calcite spar, trace yellowish gray phosphatic limestone
85-90	Sand and shell, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), fine to coarse quartz, common fine to medium phosphate,
90-95	Sand and shell, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), fine to medium quartz, minor medium to pebble phosphate, minor silt
95-100	Sand and shell, yellowish gray (5Y 7/2) to light greenish gray (5GY 8/1), unconsolidated, good to excellent apparent permeability and porosity, coarse quartz, abundant coarse phosphate, common yellowish gray (5Y 7/2) sandstone
100-105	Sandstone, greenish gray (5GY 6/1), moderately indurated, calcareous cement, good apparent permeability and porosity, common fine to medium phosphate, abundant sand and shell as above
105-110	Sandstone, greenish gray (5GY 6/1), moderately indurated, calcareous cement, good apparent permeability and porosity, common fine to medium phosphate, common sand and shell as above

Depth 110-135	<u>Lithology</u> Clayey sand, greenish gray (5GY 6/1), loosely consolidated, low apparent permeability and porosity, abundant medium to coarse phosphate, common minor sandstone as above
135-140	Sandy clay, greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), stiff, low apparent permeability and porosity, minor shell
140-145	Clayey sand, greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), loosely consolidated, low apparent permeability and porosity, abundant medium to coarse phosphate, trace shell
145-155	Sand, light greenish gray (5GY 8/1), unconsolidated, low apparent permeability and porosity, coarse to pebble quartz, common medium to coarse phosphate, minor shell, minor yellowish gray (5Y 8/1) phosphatic sandstone, trace calcareous clay
155-160	Sandy limestone, yellowish gray (5Y 8/1), mudstone to wackestone, moderately hard, well indurated, low to moderate apparent permeability and porosity, common sandstone as above, minor fine phosphate, trace shell
160-165	Limestone, yellowish gray (5Y 8/1), wackestone, moderately hard, moderately well indurated, low to moderate apparent permeability and porosity, common fine to medium quartz sand, minor medium to coarse phosphate, minor shell, trace clay
165-170	Limestone, yellowish gray (5Y 8/1), wackestone, moderately hard, moderately well indurated, low to moderate apparent permeability and porosity, minor fine to medium quartz sand, minor medium to coarse phosphate, minor shell, trace clay
170-175	Dolomitic limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), mudstone to wackestone, hard, well indurated, moderate apparent permeability and porosity, minor coarse to pebble quartz, trace fine phosphate, slightly fossiliferous
175-180	Limestone, very pale orange (10YR 8/2), wackestone to packstone, friable to moderately hard, moderately indurated, moderate to good apparent permeability and porosity, minor fine to pebble quartz, minor lime mud, trace fine to medium phosphate
180-185	Limestone, very pale orange (10YR 8/2) to yellowish gray (5Y 8/1), wackestone to packstone, friable to moderately hard, moderately indurated, moderate to good apparent permeability and porosity, minor fine to pebble quartz, minor lime mud, trace fine to pebble phosphate

<u>Depth</u> 185-190	Lithology Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone to packstone, friable to moderately hard, moderately indurated, moderate to good apparent permeability and porosity, minor fine to pebble quartz, minor fine phosphate
190-205	Marl, greenish gray (5G 6/1), soft, low apparent permeability and porosity, minor fine phosphate, minor shell
205-210	Marl, greenish gray (5G 6/1), soft, low apparent permeability and porosity, common fine phosphate, minor shell
210-215	Marl, greenish gray (5G 6/1), soft to moderately stiff, low apparent permeability and porosity, common fine phosphate, minor shell, trace fine quartz
215-220	Marly limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), mudstone to wackestone, soft to moderately hard, poorly to moderately indurated, low to moderate apparent permeability and porosity, minor shell, minor fine phosphate
220-225	Marly limestone, greenish gray (5GY 6/1), wackestone to packstone, moderately hard, moderately well indurated, low to moderate apparent permeability and porosity, minor fine phosphate
225-230	Marly limestone, light greenish gray (5GY 8/1) to greenish gray (5GY 6/1), wackestone to packstone, soft to moderately hard, poorly to moderately indurated, low to moderate apparent permeability and porosity, minor coarse quartz, minor fine phosphate, minor shell
230-235	Marl, light greenish gray (5GY 8/1), moderately stiff, low apparent permeability and porosity, common fine phosphate, abundant marly limestone as above
235-250	Clay, greenish gray (5GY 6/1), soft, low apparent porosity/permeability, calcareous, abundant coarse to pebble quartz, phosphatic sand, limestone, and shell
250-260	Clay, greenish gray (5G 6/1), soft, low apparent porosity/permeability, calcareous, moderate coarse grained quartz sand, phosphatic sand, limestone, and shell
260-270	Clay, greenish gray (5GY 6/1), soft, low apparent porosity/permeability, calcareous, abundant coarse grained quartz sand, fine grained phosphate, and limestone

<u>Depth</u> 270-275	<u>Lithology</u> Clay, greenish gray (5GY 6/1), soft, low apparent porosity/permeability, calcareous, moderate coarse grained quartz sand, fine grained phosphatic sand, and limestone
275-280	Clay, greenish gray (5GY 6/1), soft, low apparent porosity/permeability, calcareous, abundant limestone, moderate coarse grained quartz sand, minor fine grained phosphatic sand
280-285	Clay, greenish gray (5GY 6/1), very soft, very low apparent porosity/permeability, abundant limestone, minor quartz and phosphatic sand, shell, and lime mud
285-290	Clay, greenish gray (5GY 6/1), very soft, very low apparent porosity/permeability, minor quartz and phosphatic sand, shell, and lime mud
290-295	Clay, greenish gray (5GY 6/1), very soft, very low apparent porosity/permeability, minor shell and limestone, trace phosphate
295-300	Clay, greenish gray (5GY 6/1), very soft, very low apparent porosity/permeability, minor quartz and phosphatic sand, limestone, and shell
300-312	Clay, greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), very hard, very low apparent porosity/permeability, calcareous, minor fine-grained quartz and phosphatic sand, trace shell
312-320	Sandstone, medium light gray (N 6) to medium dark gray (N 4), fine- grained quartz and phosphatic sand, very hard, low apparent porosity/permeability, calcareous, abundant clay, trace shell
320-330	Clay, greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), very soft, very low apparent porosity/permeability, calcareous, moderate fine to coarse-grained quartz and phosphatic sand, shell
330-335	Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, low apparent porosity/permeability, abundant fine-grained quartz and phosphatic sand, clay, and shell
335-340	Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, low apparent porosity/permeability, abundant clay, moderate fine-grained quartz and phosphatic sand

<u>Depth</u> 340-375	Lithology Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, low apparent porosity/permeability, abundant clay, minor finegrained quartz and phosphatic sand
375-380	Clay, greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), hard, low apparent porosity/permeability, moderate limestone/shell, minor fine-grained quartz and phosphatic sand
390-400	Clay, greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), soft, low apparent porosity/permeability, calcareous, moderate limestone/shell, minor fine-grained quartz and phosphatic sand
400-420	Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, low apparent porosity/permeability, abundant clay, moderate fine-grained quartz and phosphatic sand
420-430	Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, low apparent porosity/permeability, moderate clay, fine-grained quartz and phosphatic sand
430-440	Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, moderately low apparent porosity/permeability, abundant clay, moderate fine-grained quartz and phosphatic sand
440-450	Limestone, yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, moderately low apparent porosity/permeability, abundant clay, minor fine-grained quartz and phosphatic sand
450-460	Clay, light greenish gray (5GY 8/1), soft, low apparent porosity/permeability, calcareous, abundant limestone/shell, minor fine-grained quartz and phosphatic sand
460-465	Clay, light greenish gray (5GY 8/1), soft, low apparent porosity/permeability, calcareous, moderate limestone/shell, minor fine-grained quartz and phosphatic sand
465-515	Clay, light greenish gray (5GY 8/1), soft, low apparent porosity/permeability, calcareous, minor limestone/shell, fine-grained quartz and phosphatic sand
515-520	Clay, light greenish gray (5GY 8/1), hard, very low apparent porosity/permeability, calcareous, minor limestone and shell, trace fine-grained phosphatic sand

<u>Depth</u> 520-525	Lithology Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), packstone/wackestone, slightly dolomitic, hard, low apparent porosity/permeability, abundant clay, trace fine to coarse-grained phosphatic sand
525-535	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), packstone/wackestone, slightly dolomitic, hard, low apparent porosity/permeability, common clay, trace fine to coarse-grained phosphatic sand
535-540	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), packstone/wackestone, slightly dolomitic, hard, low apparent porosity/permeability, moderate clay, trace fine to coarse-grained phosphatic sand
540-545	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), packstone/wackestone, moderately dolomitic, hard, low apparent porosity/permeability, moderate clay, trace fine to coarse-grained phosphatic sand
545-550	Limestone, pinkish gray (5YR 8/1) to light olive gray (5Y 6/1), packstone/wackestone, moderately dolomitic, very hard, low apparent porosity/permeability, minor clay, trace shell, fine to coarse-grained phosphatic sand
550-555	Limestone, pinkish gray (5YR 8/1) to light olive gray (5Y 6/1), packstone/wackestone, moderately dolomitic, very hard, low apparent porosity/permeability, moderate clay, trace shell, fine to coarse-grained phosphatic sand, softer at base of interval with increasing clay
555-560	Clay, greenish gray (5GY 6/1), soft, low apparent porosity/permeability, abundant limestone and quartz and phosphatic sand, grades downward into lime mud, yellowish gray, (5Y 8/1), hard, low apparent porosity/permeability, trace quartz and phosphatic sand
560-575	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, very hard, low apparent porosity/permeability, moderate fossils/shells, and fine quartz and phosphatic sand, grades downward into a lime mud, yellowish gray (5Y 8/1) moderately soft, low apparent porosity/permeability, moderate quartz and phosphatic sand
575-590	Limestone, very light gray (N8) and yellowish gray (5Y 8/1), mudstone/packstone, moderately hard, moderate apparent porosity/permeability, moderate clay, minor fossils/shells, trace quartz and phosphatic fine sand

<u>Depth</u> 590-615	Lithology Limestone, very light gray (N8) and yellowish gray (5Y 8/1), packstone/wackestone, moderately hard, moderate apparent porosity/permeability, abundant fossils/shells, moderate clay, trace
	quartz and phosphatic fine sand
615-620	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), mudstone/packstone, hard, moderately low apparent porosity/permeability, moderate clay and shell, trace quartz and phosphatic fine sand
620-630	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, very hard, moderately low apparent porosity/permeability, abundant clay and shell, trace quartz and phosphatic fine sand
630-665	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, very hard, moderately low apparent porosity/permeability, abundant shell, moderate clay, minor quartz and phosphatic fine sand
665-675	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, hard, moderately low apparent porosity/permeability, abundant clay, minor shell and quartz and phosphatic fine to coarse sand
675-715	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, hard, low apparent porosity/permeability, moderate clay and shell, minor quartz and phosphatic fine to coarse sand
715-735	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, hard, moderately low apparent porosity/permeability, abundant clay, moderate shell, minor quartz and phosphatic fine to coarse sand
735-755	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, very hard, low apparent porosity/permeability, abundant clay, minor shell and quartz and phosphatic fine sand
755-760	Calcareous silty fine sand, yellowish gray (5Y 8/1), soft, very high apparent porosity/permeability, moderate sandstone fragments and fine-grained quartz, minor fine-grained phosphatic sand

<u>Depth</u> 760-770	Lithology Limestone, yellowish gray (5Y 8/1), mudstone, moderately hard, low apparent porosity/permeability, moderate fine quartz sand, minor fine phosphatic sand
770-775	Lime mud, yellowish gray (5Y 8/1) moderately soft to moderately hard, low apparent porosity/permeability, moderate fine quartz sand, minor fine phosphatic sand
775-790	Limestone, yellowish gray (5Y 8/1), mudstone/packstone/wackestone, soft, low apparent porosity/permeability, abundant clay, minor shell, fine quartz and phosphatic sand
790-810	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, moderately soft, low apparent porosity/permeability, abundant clay, moderate fine quartz and phosphatic sand, minor shell
810-840	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, soft, low apparent porosity/permeability, abundant clay, minor shell, fine quartz and phosphatic sand
840-865	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, moderately low apparent porosity/permeability, abundant shell, moderate clay, minor fine to coarse quartz and phosphatic sand
865-870	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, moderately low apparent porosity/permeability, abundant shell, moderate clay, minor fine quartz and phosphatic sand and lime mud
870-880	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, moderately low apparent porosity/permeability, abundant shell, moderate clay, minor fine quartz and phosphatic sand
880-885	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), mudstone/packstone, soft, low apparent porosity/permeability, abundant clay and shell, minor fine to coarse quartz and phosphatic sand
885-890	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), mudstone/packstone, soft, low apparent porosity/permeability, abundant shell, moderate clay, minor fine to coarse quartz and phosphatic sand
890-900	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), mudstone/packstone, soft, low apparent porosity/permeability, abundant shell, moderate clay, minor fine quartz and phosphatic sand

<u>Depth</u>	Lithology
900-910	Lime mud, yellowish gray (5Y 8/1), moderately hard, low apparent porosity/permeability, trace shell and very fine-grained phosphatic sand
910-915	Limestone, yellowish gray (5Y 8/1), packstone, hard, low apparent porosity/permeability, moldic porosity, abundant fossils (gastropods, mollusks), trace very fine-grained phosphatic sand
915-920	Lime mud, yellowish gray (5Y 8/1), moderately soft to moderately hard, low apparent porosity/permeability, trace very fine-grained phosphatic sand
920-945	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, low apparent porosity/permeability, moderate fossils and shells, minor clay, trace phosphatic very fine sand
945-950	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, moderately low apparent porosity/permeability, abundant fossils and shell, minor clay and phosphatic fine sand
950-960	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, moderately low apparent porosity/permeability, abundant fossils and shell, minor clay, trace quartz and phosphatic fine sand
960-970	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, hard, low apparent porosity/permeability, abundant fossils and shell, minor clay, trace quartz and phosphatic fine sand
970-980	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, low apparent porosity/permeability, abundant fossils and shell, minor clay, trace quartz and phosphatic fine sand
980-990	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, very hard, low apparent porosity/permeability, abundant fossils and shell, minor clay, trace quartz and phosphatic fine sand
990-1000	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, low apparent porosity/permeability, abundant fossils and shell, minor clay, trace quartz and phosphatic fine sand
1000-1055	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, soft, low apparent porosity/permeability, moderate shell, minor clay, trace quartz and phosphatic fine sand

<u>Depth</u> 1070-1075	Lithology Limestone, yellowish gray (5Y 8/1), wackestone/packstone, soft, low apparent porosity/permeability, minor clay, minor shell, trace quartz and phosphatic fine sand
1075-1080	Clay, yellowish gray (5Y 8/1), soft, very low apparent porosity/ permeability, calcareous, moderate limestone (mudstone/wackestone), minor shell, trace quartz and phosphatic fine sand
1080-1085	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, moderately soft, low to moderate apparent porosity/permeability, minor clay and shell, trace quartz and phosphatic fine sand
1085-1090	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, moderately soft, low to moderate apparent porosity/permeability, minor clay and shell, trace quartz and phosphatic fine sand
1090-1120 (cored interval)	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, low apparent porosity/permeability, friable, moderate shells/fossils, trace quartz and phosphatic fine sand
1120-1125	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, minor clay, trace phosphatic fine sand
1125-1130	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, trace clay and phosphatic fine sand
1130-1140	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, trace quartz and phosphatic fine sand
1140-1145	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, marly, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, minor phosphatic clay, trace quartz and phosphatic fine sand
1145-1155	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, trace quartz and phosphatic fine sand
1155-1160	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, marly, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, minor phosphatic clay, trace quartz and phosphatic fine sand

<u>Depth</u> 1160- 1 165	<u>Lithology</u> Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, trace quartz and phosphatic fine sand
1165-1180	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, marly, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, minor phosphatic clay, trace quartz and phosphatic fine sand
1180-1210	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately indurated, moderate to good apparent porosity/permeability, moderate shell
1210-1235	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, moderately well indurated, moderate to good apparent porosity/permeability, moderate shell
1235-1240	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, moderately well indurated, moderate to good apparent porosity/permeability, moderate shell, trace light olive gray (5Y 6/1) dolostone
1240-1275	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, moderately well indurated, moderate to good apparent porosity/permeability, moderate shell
1275-1290	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, moderately well indurated, moderate to good apparent porosity/permeability, moderate shell, minor very light gray (N8) to yellowish gray (5Y 8/1) phosphatic lime mud
1290-1305	Limestone, yellowish gray (5Y 8/1), mudstone/packstone, moderately well indurated, moderate to good apparent porosity/permeability, moderate shell
1305-1325 (cored interval)	Limestone, yellowish gray (5Y 8/1), mudstone/wackestone, moderately hard, low to moderate apparent porosity/permeability, moderate shells/fossils, trace quartz and phosphatic fine sand. Grades downward into limestone, light greenish gray (5GY 8/1), packstone, hard, moderate to good apparent porosity/permeability, abundant shells/fossils. Grades downward into clay, light greenish gray (5GY 8/1), poorly indurated, low apparent porosity/permeability, calcareous, abundant white (N9) lime mud nodules and streaks.

<u>Depth</u> 1325-1330	Lithology Limestone, yellowish gray (5Y 8/1), wackestone/packstone, moderately indurated, marly, low to moderate apparent porosity/permeability, moderate shell, common very light gray (N8) clay, minor phosphatic fine sand
1330-1340	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, moderately indurated, moderate to good apparent porosity/permeability, moderate shell, minor very light gray (N8) clay, minor phosphatic fine sand
1340-1345	Limestone, yellowish gray (5Y 8/1), wackestone/packstone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell, common very light gray (N8) clay, minor dark greenish gray (5GY 4/1) stiff clay, minor phosphatic fine sand
1345-1365	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, moderately indurated, low to moderate apparent porosity/permeability, moderate shell and very light gray (N8) clay, trace phosphatic fine sand
1365-1398	Limestone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), wackestone/packstone, poorly to moderately indurated, low apparent porosity/permeability, moderate shell, common very light gray (N8) clay, minor yellowish gray (5Y 8/1) to very light gray (N8) lime mud, trace phosphatic fine sand

APPENDIX 3-2 FGS LITHOLOGIC DESCRIPTIONS

LITHOLOGIC WELL LOG PRINTOUT SOURCE - FGS

WELL NUMBER: W-18464 COUNTY -HY18464

TOTAL DEPTH: 1400 FT. T.44S R.28E S.06 LOCATION: SAMPLES - NONE LAT = 26D 41M 13S

LON = 81D 33M 13S

ELEVATION: 21 FT COMPLETION DATE: N/A

OTHER TYPES OF LOGS AVAILABLE - NONE

OWNER/DRILLER:SFWMD/DIVERSIFIED DRILLING CORP.

WORKED BY:E. DORN 9/2004

SECTION ABB

BERRY GROVE; EXBRY-1 SAMPLES NOT WASHED; REVERSE-AIR DRILLED

75. 121PCPC PLIOCENE-PLEISTOCENE

75. _ 215. 122PCRV PEACE RIVER FM. _

215. 835. 122ARCA ARCADIA FM.

- 1075. 835. 123SWNN SUWANNEE LIMESTONE

1075. - 1400. 1240CAL OCALA GROUP

0 -10 NO SAMPLES

10 -20 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: SHELL-20%, CLAY-03%

FOSSILS: MOLLUSKS

20 -30 CLAY; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR; MODERATE INDURATION

CEMENT TYPE(S): CLAY MATRIX

ACCESSORY MINERALS: CALCILUTITE-05%, SHELL-02%

FOSSILS: MOLLUSKS

30 -MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 40

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-10%, SHELL-05%, CLAY-01%

FOSSILS: MOLLUSKS

40 -45 SAND; TRANSPARENT TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO GRANULE ROUNDNESS: ANGULAR TO WELL-ROUNDED; LOW SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: CALCILUTITE-05%, SHELL-01%

FOSSILS: MOLLUSKS

45 -50 SAND; TRANSPARENT TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO GRAVEL

ROUNDNESS: ANGULAR TO WELL-ROUNDED; LOW SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: LIMESTONE-20%, SHELL-03%

FOSSILS: MOLLUSKS

- 50 55 SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO GRAVEL ROUNDNESS: WELL-ROUNDED TO ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-10%, SHELL-01% FOSSILS: MOLLUSKS
- 55 60 CALCILUTITE; YELLOWISH GRAY TO YELLOWISH GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, CRYSTALS
 01% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE
 RANGE: VERY FINE TO MICROCRYSTALLINE; UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-20%, SHELL- T%
 FOSSILS: MOLLUSKS
- 60 65 CALCILUTITE; YELLOWISH GRAY TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, CRYSTALS 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-30%, SHELL- T% FOSSILS: MOLLUSKS
- 65 70 SHELL BED; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR; UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-10%, LIMESTONE-10% FOSSILS: MOLLUSKS
- 70 75 SHELL BED; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR; UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-05%, LIMESTONE-03% FOSSILS: MOLLUSKS, BARNACLES
- 75 80 SAND; TRANSPARENT TO VERY LIGHT ORANGE
 POROSITY: INTERGRANULAR
 GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM
 ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: LIMESTONE-30%, SHELL-30%, CALCITE-05%
 FOSSILS: MOLLUSKS, BARNACLES
- 80 85 SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-15%, SHELL-15%, CALCITE- T% FOSSILS: MOLLUSKS, BARNACLES
- 85 95 SAND; TRANSPARENT TO VERY LIGHT ORANGE
 POROSITY: INTERGRANULAR
 GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE
 ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY
 UNCONSOLIDATED
 ACCESSORY MINERALS: LIMESTONE-30%, SHELL-15%
 PHOSPHATIC SAND-02%
 FOSSILS: MOLLUSKS

95	-	100	SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-20%, SHELL-15%, CALCITE-05% PHOSPHATIC SAND-03% FOSSILS: MOLLUSKS
100	-	105	AS ABOVE
105	-	110	SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-20%, SHELL-20% PHOSPHATIC SAND-05% FOSSILS: MOLLUSKS
110	-	115	SAND; NO COLOR GIVEN TO LIGHT GRAYISH RED 9 % POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-05%, SHELL-05% PHOSPHATIC SAND-05% FOSSILS: MOLLUSKS, BARNACLES
115	-	120	AS ABOVE
120	-	125	SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-01%, SHELL-01% FOSSILS: FOSSIL FRAGMENTS
125	-	130	SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-02%, SHELL-05% PHOSPHATIC SAND-05% FOSSILS: MOLLUSKS, BARNACLES
130	-	135	SAND; TRANSPARENT TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED ACCESSORY MINERALS: LIMESTONE-05%, SHELL-03% PHOSPHATIC SAND-05% FOSSILS: MOLLUSKS, BARNACLES
135	-	140	SAND; TRANSPARENT TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN SIZE: FINE; RANGE: VERY FINE TO COARSE ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY UNCONSOLIDATED

ACCESSORY MINERALS: CLAY-05%, SHELL-03%

FOSSILS: MOLLUSKS, BARNACLES

SAND; TRANSPARENT TO YELLOWISH GRAY 140 - 145

POROSITY: INTERGRANULAR

GRAIN SIZE: COARSE; RANGE: VERY FINE TO COARSE

ROUNDNESS: SUB-ROUNDED TO SUB-ANGULAR; LOW SPHERICITY

UNCONSOLIDATED

ACCESSORY MINERALS: LIMESTONE-05%, SHELL-03%

PHOSPHATIC SAND-03%

FOSSILS: MOLLUSKS, BARNACLES

145 - 150 WACKESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-05%

PHOSPHATIC SAND-01%

FOSSILS: MOLLUSKS, BARNACLES

150 - 155 WACKESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, CRYSTALS

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

FOSSILS: MOLLUSKS, BARNACLES

155 - 160 WACKESTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, CRYSTALS

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-30%, PHOSPHATIC SAND-03%

OTHER FEATURES: LOW RECRYSTALLIZATION

FOSSILS: BARNACLES

160 - 165 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, CRYSTALS

15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-02%, PHOSPHATIC SAND-01%

OTHER FEATURES: LOW RECRYSTALLIZATION

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

165 - 170 AS ABOVE

170 - 175 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET 20% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

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MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-02%, QUARTZ SAND-01%

CALCITE- T%

FOSSILS: NO FOSSILS

175 - 180 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET 20% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

OTHER FEATURES: LOW RECRYSTALLIZATION, DOLOMITIC

FOSSILS: NO FOSSILS

180 - 185 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, CRYSTALS

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-01%

OTHER FEATURES: LOW RECRYSTALLIZATION, DOLOMITIC

FOSSILS: NO FOSSILS

185 - 190 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, CRYSTALS

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-01%

OTHER FEATURES: LOW RECRYSTALLIZATION, DOLOMITIC

FOSSILS: BARNACLES

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 190 - 195

GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-20%, PHOSPHATIC SAND-15%

CLAY-10%

OTHER FEATURES: CHALKY

FOSSILS: NO FOSSILS

CLAY MIXED WITH MICRITE

195 - 200 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-05%

CLAY-10%

OTHER FEATURES: CHALKY

FOSSILS: SHARKS TEETH

200 - 205 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE Page 5

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

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

CLAY-05%

OTHER FEATURES: CHALKY

FOSSILS: MOLLUSKS

205 - 210 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-40%, PHOSPHATIC SAND-05%

CLAY-05%

FOSSILS: NO FOSSILS

MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR 210 - 215

GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-20%, PHOSPHATIC SAND-01%

CLAY-05%, CALCITE-01% OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR 215 - 220

GRAIN TYPE: CALCILUTITE, PELLET

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-01%, PHOSPHATIC SAND- T%

CLAY-03%

OTHER FEATURES: CHALKY

FOSSILS: FOSSIL FRAGMENTS

220 - 225 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET 20% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

OTHER FEATURES: CHALKY

FOSSILS: FOSSIL FRAGMENTS

225 - 230MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE

RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

OTHER FEATURES: CHALKY

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE 230 - 235 POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-07%, PHOSPHATIC SAND-01% **CLAY-02%** OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 235 - 240 GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-01%, CLAY- T% OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS 240 - 245 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND- T%, PHOSPHATIC SAND-01% CLAY- T% OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS 245 - 250 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-01%, CLAY-01% OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS SAMPLE APPEARS UNWASHED 250 - 255 AS ABOVE MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 255 -260 GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-01%, CLAY-01% PHOSPHATIC SAND-01% OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS 260 - 265 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE

> RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION Page 7

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-01%, CLAY-01%

PHOSPHATIC SAND-01% OTHER FEATURES: CHALKY FOSSILS: FOSSIL FRAGMENTS

265 - 270 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: QUARTZ SAND-03%, PHOSPHATIC SAND-05% CLAY-01%

OTHER FEATURES: CHALKY
FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS, SHARKS TEETH

- 270 275 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-07% LIMESTONE-10% FOSSILS: NO FOSSILS
- 275 280 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR UNCONSOLIDATED ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-07% LIMESTONE-10%, SHELL-05% FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS
- 280 285 MUDSTONE; LIGHT OLIVE GRAY TO YELLOWISH GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE; 02% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE
 RANGE: VERY FINE TO MICROCRYSTALLINE; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: CLAY-35%, QUARTZ SAND-10%
 PHOSPHATIC SAND-10%, SHELL-03%
 FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS
- 285 290 CLAY; LIGHT OLIVE GRAY TO YELLOWISH GRAY
 POROSITY: INTERGRANULAR; MODERATE INDURATION
 CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
 ACCESSORY MINERALS: CALCILUTITE-40%, QUARTZ SAND-01%
 PHOSPHATIC SAND-02%
 FOSSILS: FOSSIL FRAGMENTS
- 290 295

 MUDSTONE; LIGHT OLIVE GRAY TO YELLOWISH GRAY
 POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE
 RANGE: VERY FINE TO MICROCRYSTALLINE; MODERATE INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
 ACCESSORY MINERALS: CLAY-40%, QUARTZ SAND-01%
 PHOSPHATIC SAND-05%, SHELL-05%
 FOSSILS: FOSSIL FRAGMENTS
- 295 300 CLAY; LIGHT OLIVE GRAY TO YELLOWISH GRAY POROSITY: INTERGRANULAR; MODERATE INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX ACCESSORY MINERALS: CALCILUTITE-30%, PHOSPHATIC SAND-30% QUARTZ SAND-05%

EXBRY1-FGS Lith Log FOSSILS: NO FOSSILS

			1033123. 110 1033123
300	-	305	AS ABOVE
305	-	310	AS ABOVE
310	-	315	CLAY; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX ACCESSORY MINERALS: LIMESTONE-15%, PHOSPHATIC SAND-30% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
315	-	320	CLAY; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX ACCESSORY MINERALS: CALCILUTITE-20%, LIMESTONE-01% PHOSPHATIC SAND-25%, QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
320	-	325	CLAY; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX ACCESSORY MINERALS: CALCILUTITE-10%, LIMESTONE-20% PHOSPHATIC SAND-25%, QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
325	-	330	CALCILUTITE; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: LIMESTONE-20%, CLAY-20% PHOSPHATIC SAND-20%, QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
330	-	335	WACKESTONE; YELLOWISH GRAY TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 20% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-20% QUARTZ SAND-02% FOSSILS: FOSSIL FRAGMENTS, BRYOZOA, MOLLUSKS
335	_	340	MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-20% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
340	-	345	MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION Page 9

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-20%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

345 - 350 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

350 - 355 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

355 - 360 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

07% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS

360 - 365 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-01%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS

365 - 370 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND- T%

FOSSILS: FOSSIL FRAGMENTS, MOLLUSKS

370 - 375 MUDSTONE; YELLOWISH GRAY TO VERY LIGHT ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

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10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

375 - 380 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX

ACCESSORY MINERALS: CLAY-40%, PHOSPHATIC SAND-10%

OUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

380 - 385 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX

ACCESSORY MINERALS: CLAY-40%, PHOSPHATIC SAND-10%

QUARTZ SAND-02%

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 385 - 390

GRAIN TYPE: CALCILUTITE, SKELETAL

05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-15%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

390 - 395 NO SAMPLES

395 - 400 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

05% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-05%

OUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

400 - 405 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-03%

QUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 405 - 410 POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-03%

QUARTZ SAND-02%

FOSSILS: FOSSIL FRAGMENTS

- MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 410 - 415 GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-03% QUARTZ SAND-02% FOSSILS: FOSSIL FRAGMENTS
- 415 420 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-03% QUARTZ SAND-02% FOSSILS: FOSSIL FRAGMENTS
- 420 425 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-05% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS
- 425 430 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL 20% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-03% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS
- 430 435 AS ABOVE
- 435 440 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS Page 12

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

WACKESTONE: VERY LIGHT ORANGE TO YELLOWISH GRAY 440 - 445 POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

445 - 450 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

450 - 455 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL

15% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-02%

FOSSILS: FOSSIL FRAGMENTS

455 - 460 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-01%

QUARTZ SAND-03%

FOSSILS: FOSSIL FRAGMENTS

- 460 465 AS ABOVE
- 465 470 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS

10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-25%, QUARTZ SAND-05%

CLAY-01%

FOSSILS: FOSSIL FRAGMENTS

470 - 475 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, QUARTZ SAND-05% **CLAY-05%** FOSSILS: FOSSIL FRAGMENTS WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 475 - 480 POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, QUARTZ SAND-05% **CLAY-05%** FOSSILS: FOSSIL FRAGMENTS 480 - 485 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-20%, CLAY-20% QUARTZ SAND-05% FOSSILS: FOSSIL FRAGMENTS 485 - 490 WACKESTONE: VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-15% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS 490 - 495 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-07%, PHOSPHATIC SAND-20% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 495 - 500 GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX Page 14

ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-15%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 500 - 505

GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-10%, CLAY-05%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

505 - 510 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-07%, CLAY-03%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

510 - 515 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 515 - 520

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 520 - 525

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 525 - 530

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-03%, QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 530 - 535 GRAIN TYPE: CALCILUTITE, INTRACLASTS 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-03%, QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 535 - 540 AS ABOVE 540 - 545 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-03%, QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 545 - 550 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-02%, CLAY-10% FOSSILS: FOSSIL FRAGMENTS 550 - 555 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-03%, CLAY-05% FOSSILS: FOSSIL FRAGMENTS 555 - 560 NO SAMPLES 560 -565 NO SAMPLES 565 -570 NO SAMPLES 570 -575 NO SAMPLES 575 - 580 METAMORPHIC; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX ACCESSORY MINERALS: LIMESTONE-50% FOSSILS: FOSSIL FRAGMENTS 580 - 585 METAMORPHIC; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE

ACCESSORY MINERALS: LIMESTONE-48%, PHOSPHATIC SAND-02% Page 16

POROSITY: INTERGRANULAR; POOR INDURATION

CEMENT TYPE(S): CLAY MATRIX

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY 585 - 590 POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: CLAY-45%, PHOSPHATIC SAND-05% FOSSILS: FOSSIL FRAGMENTS 590 - 595 AS ABOVE MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 595 - 600 GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: CLAY-47%, PHOSPHATIC SAND-03% FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 600 - 605 GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-05% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS 605 - 610 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-05% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS 610 - 615 AS ABOVE 615 -620 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-03% OUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 620 - 625 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND-03%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

625 - 630 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-05% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 630 - 635 AS ABOVE MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 635 - 640 GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-03%, PHOSPHATIC SAND-05% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 640 - 645 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-05% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 645 - 650 MUDSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-03% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 650 - 655 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-05%, CLAY-03% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 655 - 660 GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX Page 18

ACCESSORY MINERALS: PHOSPHATIC SAND-05%, CLAY-05%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 660 - 665 GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-15%, PHOSPHATIC SAND-03%

FOSSILS: FOSSIL FRAGMENTS

665 - 670 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-15%, PHOSPHATIC SAND-03%

- FOSSILS: FOSSIL FRAGMENTS
- 670 675 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-15%, PHOSPHATIC SAND-02% FOSSILS: FOSSIL FRAGMENTS
- 675 680 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-01% FOSSILS: FOSSIL FRAGMENTS

- 680 685 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-02% FOSSILS: FOSSIL FRAGMENTS
- MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 685 - 690 GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

FOSSILS: FOSSIL FRAGMENTS

690 - 695 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-02% FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 695 - 700 GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND-02% FOSSILS: FOSSIL FRAGMENTS MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 700 - 705 GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND-03% QUARTZ SAND-05% FOSSILS: FOSSIL FRAGMENTS 705 - 710 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND-03% QUARTZ SAND-05% FOSSILS: FOSSIL FRAGMENTS 710 - 715 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-02% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS 715 - 720 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-05% QUARTZ SAND-07%

FOSSILS: FOSSIL FRAGMENTS

MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY 720 - 725 POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-05%

QUARTZ SAND-07%

POOR INDURATION

FOSSILS: FOSSIL FRAGMENTS

725 - 730 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-15%, PHOSPHATIC SAND-05%

QUARTZ SAND-05%

FOSSILS: FOSSIL FRAGMENTS

730 - 735 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-03%

QUARTZ SAND-05%

FOSSILS: FOSSIL FRAGMENTS

735 - 740 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND-05%

QUARTZ SAND-05%

FOSSILS: FOSSIL FRAGMENTS

740 - 745 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-03%

QUARTZ SAND-05%

FOSSILS: FOSSIL FRAGMENTS

- 745 750 NO SAMPLES
- 750 755 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL

10% ALLOCHEMICAL CONSTITUENTS

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GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-15%, PHOSPHATIC SAND-05%

QUARTZ SAND-10%

FOSSILS: FOSSIL FRAGMENTS

- 755 760 NO SAMPLES
- 760 765 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-35%, PHOSPHATIC SAND-03% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS
- 765 770 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-05% QUARTZ SAND-05% FOSSILS: FOSSIL FRAGMENTS
- 770 775

 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, SKELETAL
 10% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: CLAY-35%, PHOSPHATIC SAND-05%
 QUARTZ SAND-05%
 FOSSILS: FOSSIL FRAGMENTS
- 775 780 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-05% QUARTZ SAND-05% FOSSILS: FOSSIL FRAGMENTS
- 780 785 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-05% GOSSILS: FOSSIL FRAGMENTS

785 - 790 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-30%, PHOSPHATIC SAND-05% QUARTZ SAND-05% FOSSILS: FOSSIL FRAGMENTS 790 - 795 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-03% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS, ECHINOID 795 - 800 MUDSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-02% QUARTZ SAND-02% FOSSILS: FOSSIL FRAGMENTS 800 - 805 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, INTRACLASTS 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND-02% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS 805 - 810 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, INTRACLASTS 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-25%, PHOSPHATIC SAND-02% QUARTZ SAND-03% FOSSILS: FOSSIL FRAGMENTS 810 - 815 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, INTRACLASTS 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX Page 23

ACCESSORY MINERALS: CLAY-40%, PHOSPHATIC SAND-02%

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

- 815 820 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 20% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-40%, PHOSPHATIC SAND-01% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
- 820 825 CLAY; LIGHT OLIVE GRAY TO VERY LIGHT ORANGE POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX ACCESSORY MINERALS: LIMESTONE-45%, PHOSPHATIC SAND-01% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
- 825 830 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, SKELETAL
 20% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: CLAY-15%, PHOSPHATIC SAND-01%
 QUARTZ SAND-01%
 FOSSILS: FOSSIL FRAGMENTS
- 830 835 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-20%, PHOSPHATIC SAND- T% QUARTZ SAND- T% FOSSILS: FOSSIL FRAGMENTS
- 835 840 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 15% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-01% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
- 840 845
 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL
 20% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-01%
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QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

- 845 850 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-01% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
- 850 855 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-07%, PHOSPHATIC SAND-01% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
- 855 860 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-01% QUARTZ SAND-01% FOSSILS: FOSSIL FRAGMENTS
- 860 865 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET
 25% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-01%
 QUARTZ SAND-01%
 FOSSILS: FOSSIL FRAGMENTS
- 865 870 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET
 25% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION
 CEMENT TYPE(S): CALCILUTITE MATRIX
 ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND-01%
 QUARTZ SAND-01%
 FOSSILS: FOSSIL FRAGMENTS
- 870 875 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR
 GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET
 25% ALLOCHEMICAL CONSTITUENTS
 GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE
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POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND- T%

QUARTZ SAND- T%

FOSSILS: FOSSIL FRAGMENTS

875 - 880 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 20% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC SAND- T%

QUARTZ SAND- T%

FOSSILS: FOSSIL FRAGMENTS

880 - 885 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 25% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-03%, PHOSPHATIC SAND-01%

QUARTZ SAND- T%

FOSSILS: FOSSIL FRAGMENTS

885 - 890 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

25% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-03%, PHOSPHATIC SAND-01%

QUARTZ SAND- T%

FOSSILS: FOSSIL FRAGMENTS

890 - 895 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

30% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-01%

FOSSILS: FOSSIL FRAGMENTS

895 - 900 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

35% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

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

QUARTZ SAND-01%, CALCITE-01% FOSSILS: FOSSIL FRAGMENTS

900 - 905 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-07%, PHOSPHATIC SAND- T%

FOSSILS: FOSSIL FRAGMENTS

905 - 910 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

35% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-01%, QUARTZ SAND-01%

PYRITE-10%, CLAY-02%

FOSSILS: FOSSIL FRAGMENTS

PYRITE LOOXS OXIDIZED: ~20% OF SAMPLE IS DRILL CASING SCALES

910 - 915 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PYRITE-03%, CLAY-02%

FOSSILS: FOSSIL FRAGMENTS

915 - 920 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

30% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: QUARTZ SAND-03%, PYRITE-01%

FOSSILS: FOSSIL FRAGMENTS

PYRITE IS OXIDIZED

920 - 925 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

25% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-01%, QUARTZ SAND-03%

CLAY-01%

FOSSILS: FOSSIL FRAGMENTS

925 - 930 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

30% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND-01%, QUARTZ SAND-01%

PYRITE-01%

FOSSILS: FOSSIL FRAGMENTS

PYRITE IS OXIDIZED

930 - 935 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 30% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-01%, CLAY-01% FOSSILS: FOSSIL FRAGMENTS 935 - 940 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND-01%, CLAY-01% PYRITE-01% FOSSILS: FOSSIL FRAGMENTS 940 - 945 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND- T%, CLAY- T% QUARTZ SAND- T% FOSSILS: FOSSIL FRAGMENTS 945 - 950 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND- T%, CLAY-01% FOSSILS: FOSSIL FRAGMENTS 950 - 955 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL 20% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: PHOSPHATIC SAND- T% FOSSILS: FOSSIL FRAGMENTS 955 - 960 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET 20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: FINE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: CLAY-01% 960 - 965 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY Page 28

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET

25% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: PHOSPHATIC SAND- T%

965 - 970 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET

35% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01% FOSSILS: FOSSIL FRAGMENTS

970 - 975 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET

35% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

- FOSSILS: FOSSIL FRAGMENTS
- 975 980 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, INTRACLASTS, PELLET

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-10%

FOSSILS: FOSSIL FRAGMENTS

980 - 985 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: ÍNTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-02%

FOSSILS: FOSSIL FRAGMENTS

- 985 990 NO SAMPLES
- 990 995 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS

995 - 1000 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

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45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01% FOSSILS: FOSSIL FRAGMENTS

1000 - 1005 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-02% FOSSILS: FOSSIL FRAGMENTS

1005 - 1010 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-02% FOSSILS: FOSSIL FRAGMENTS

1010 - 1015 WACKESTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

PACKSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY 1015 - 1020

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, INTRACLASTS

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

PACKSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 1020 - 1025

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

1025 - 1030 PACKSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

PACKSTONE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY POROSITY: INTERGRANULAR 1030 - 1035

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

1035 - 1040 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

1040 - 1045 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01%

FOSSILS: FOSSIL FRAGMENTS

1045 - 1050 AS ABOVE

1050 - 1055 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: FINE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: CLAY-01% FOSSILS: FOSSIL FRAGMENTS

1055 - 1060 NO SAMPLES

1060 - 1065 NO SAMPLES

1065 - 1070 NO SAMPLES

1070 - 1075 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

NUMMULITES; LEPIDOCYCLINA

1075 - 1080 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY Page 31

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

50% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

OTHER FEATURES: CHALKY, POOR SAMPLE

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

NUMMULITES; LOTS OF CASING AND SPIDERWEBS

1080 - 1085 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

OTHER FEATURES: CHALKY, POOR SAMPLE

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1085 - 1090 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

NUMMULITES

1090 - 1095 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

40% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

NUMMULITES

1095 - 1100 NO SAMPLES

1100 - 1105 NO SAMPLES

1105 - 1110 NO SAMPLES

1110 - 1115 NO SAMPLES

1115 - 1120 NO SAMPLES

1120 - 1125 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

LEPIDOCYCLINA; NUMMULITES

1125 - 1130 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA, ECHINOID

NUMMULITES; LEPIDOCYCLINA

1130 - 1135 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES; LEPIDOCYCLINA

1135 - 1140 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES; LEPIDOCYCLINA

1140 - 1145 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES; LEPIDOCYCLINA

1145 - 1150 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 1150 - 1155

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES; LEPIDOCYCLINA

PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE 1155 - 1160

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES; LEPIDOCYCLINA

1160 - 1165 AS ABOVE

1165 - 1170 PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

NUMMULITES; LEPIDOCYCLINA

1170 - 1175 PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, BRYOZOA

PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE 1175 - 1180

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

1180 - 1185 PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, BRYOZOA

PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE POROSITY: INTERGRANULAR 1185 - 1190

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, BRYOZOA

1190 - 1195 AS ABOVE

1195 - 1200 WACKESTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, BRYOZOA

1200 - 1205 WACKESTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

1205 - 1210 PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, BRYOZOA

1210 - 1215 PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS, BRYOZOA

NUMMULITES. LEPIDOCYCLINA

1215 - 1220 PACKSTONE; VERY LIGHT ORANGE TO GRAYISH ORANGE POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: IRON STAIN- T%

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL FRAGMENTS

1220 - 1225 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

LEPIDOCYCLINA; NUMMULITES

WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1225 - 1230

POROSITY: INTERGRANULAR

GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET

45% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE

	EXBRY	1-FGS	Lith	Log
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POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA 1230 - 1235 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA LEPIDOCYCLINA; NUMMULITES 1235 - 1240 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA 1240 - 1245 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 55% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA 1245 - 1250 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 45% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA, ECHINOID 1250 - 1255 NO SAMPLES 1255 - 1260 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 45% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA 1260 - 1265 WACKESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL, PELLET 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX

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FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

1265 - 1270

GRAIN TYPE: SKELETAL, CALCILUTITE, PELLET

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1270 - 1275 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1275 - 1280

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA, ECHINOID

1280 - 1285 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE

55% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1285 - 1290

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1290 - 1295 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE 65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1295 - 1300 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1300 - 1305 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

- 1305 1310 NO SAMPLES
- 1310 1315 NO SAMPLES
- 1315 1320 NO SAMPLES
- 1320 1325 NO SAMPLES
- PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1325 - 1330

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: ORGANICS-05%

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1330 - 1335

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE

65% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1335 - 1340

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: ORGANICS-05%

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1340 - 1345 PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY 1345 - 1350

POROSITY: INTERGRANULAR

GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE

75% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: ORGANICS-02%

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1350 - 1355	EXBRY1-FGS Lith Log PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE 75% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: ORGANICS-01% FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA, ECHINOID
1355 - 1360	PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA
1360 - 1365	PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, PELLET, CALCILUTITE 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA
1365 - 1370	AS ABOVE
1370 - 1375	PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE 75% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA
1375 - 1380	PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: SKELETAL, INTRACLASTS, CALCILUTITE 65% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA
1380 - 1385	PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: INTRACLASTS, SKELETAL, CALCILUTITE 65% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA
1385 - 1390	PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR GRAIN TYPE: INTRACLASTS, CALCILUTITE, SKELETAL 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE POOR INDURATION Page 39

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 1390 - 1395

GRAIN TYPE: PELLET, CALCILUTITE, SKELETAL

60% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

PACKSTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY POROSITY: INTERGRANULAR 1395 - 1400

GRAIN TYPE: INTRACLASTS, CALCILUTITE, SKELETAL

70% ALLOCHEMICAL CONSTITUENTS

GRAIN SIZE: COARSE; RANGE: VERY COARSE TO MICROCRYSTALLINE

POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX ACCESSORY MINERALS: ORGANICS-01%

FOSSILS: FOSSIL FRAGMENTS, BENTHIC FORAMINIFERA

1400 TOTAL DEPTH