

P759

St. Petersburg Bank and Trust Co. Unit 35-4
 Manatee County, Florida
 35-33S-20E

Depth	Description
0-100	No sample.
100-130	Sand and clay, medium-gray, semi-indurated: 70 percent fine to coarse subrounded to rounded water-polished sand. 30 percent light-gray calcareous clay matrix. Trace of medium-grained light to dark-brown phosphate. Low porosity.
130-160	Clay, olive-green, soft to semi-indurated; containing 25 percent very fine-grained angular well-sorted sand. Very fine-grained black to dark-brown phosphate prominent.
160-190	Clay, dark olive-green, massive. Coarse-grained rounded water-polished sand, coarse-grained black phosphate prominent.
190-220	Clay as above with increase in phosphate to 25 percent of sample, increase in sand to 20 percent, corresponding decrease in clay.
220-250	Clay as 160-190 foot interval with white calcareous clay prominent. Add trace of black pebble phosphate.
250-280	Clay as above.
280-310	Clay, very pale green, massive, calcareous. Trace of medium to coarse-grained black phosphate, medium-grained sand.
310-340	Dolomitic limestone, white, well indurated, chalky to fine crystalline. Fine to coarse-grained black phosphate prominent. Low porosity.
340-370	Clay, light-gray, calcareous, massive, hard. Very fine to fine-grained black phosphate prominent. Trace of dark-gray chert.
370-400	Limestone, white, microcrystalline, soft to well indurated. 15 percent fine to coarse-grained light-brown to black phosphate. Trace of dark-gray chert. Low porosity.
400-406	No sample.
406-430	Two rock types: 70 percent medium-gray soft calcareous clay, salt-and-pepper with very fine black organic particles prominent. 30 percent tan fine crystalline sandy limestone with fine shell fragments (echinoid and pelecypod) prominent.
430-460	Limestone, tan, sandy, well indurated: 65 percent microcrystalline (mostly) to fine crystalline light-tan limestone matrix. 35 percent very fine to fine-grained subangular to subrounded sand. Low porosity.
460-490	Limestone as above but white to tan (interbedded?).
490-520	Limestone as above.
520-550	Pelletal limestone, white, well indurated: 70 percent fine white limestone pellets and scattered small foraminifera. 30 percent microcrystalline to fine crystalline limestone matrix. Fauna includes <u>Archais</u> sp., a Miocene form. Low porosity.
550-580	Pelletal limestone as above with gastropod molds prominent. Good porosity, due to less matrix binding pellets.
580-610	Pelletal limestone as 520-550 foot interval. Fauna includes <u>Pararotalia mexicana</u> , an Oligocene form.
610-640	Pelletal limestone as above with pelecypod casts and molds prominent.

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Depth	Description
640-670	Limestone, white with tan cast, well-indurated, fine to medium pelletal, consists of small to medium-sized microcrystalline limestone pellets and foram tests in 20 percent fine crystalline limestone matrix. Fair porosity. Fauna includes <u>Pararotalia mexicana</u> , an Oligocene form, and <u>Discorinopsis gunteri</u> , which ranges from Claiborne to Oligocene in age.
670-700	Pelletal limestone as above but porous to tight in streaks, depending on amount of limestone matrix.
700-730	Two rock types: 75 percent porous off-white finely to coarsely pelletal limestone, pellets bound by 20 percent microcrystalline soft chalky limestone matrix. 25 percent light-brown fine crystalline dolomite with scattered pinpoint porosity.
730-760	Dolomite as above but fine to medium crystalline. Add trace of vuggy porosity. Much cement in cuttings.
760-790	Limestone, white, chalky, soft, porous. 65 percent fine white limestone particles and small (mostly) forams loosely cemented by 35 percent soft white argillaceous limestone matrix. <u>Lepidocyclina</u> sp. prominent. Fair porosity.
790-820	Limestone, white, chalky, soft to hard, argillaceous with fine calcite crystals very prominent. <u>Lepidocyclina</u> and large <u>Camerina</u> sp. make up 15 percent of rock. Low porosity.
820-850	Limestone as above.
850-880	Limestone as above.
880-910	Limestone as above with increase in large forams (mostly <u>Camerina</u>) to 25 percent of rock. Fair porosity.
910-940	Limestone as above.
940-970	Dolomite, medium-brown, medium crystalline, massive, hard. Isolated vugs prominent, mostly unconnected. Low overall porosity.
970-1000	Two rock types: 70 percent dolomite as above but medium-brown to tan. 30 percent coarse pelletal tan highly porous limestone with <u>Dictyoconus</u> and other medium-sized forams prominent.
1000-1030	Dolomite, light-gray with tan cast, fine to coarse crystalline. Considerable intercrystalline porosity, scattered vuggy porosity.
1030-2582	No sample.
2582-2600	Dolomite, light-gray, very fine crystalline (crystals silt-sized or just above), massive, hard, cuts up fine, low porosity. Trace of up-hole gypsum as discrete particles.
2600-2630	Limestone, light-gray, medium pelletal: 65 percent medium-sized microcrystalline limestone pellets. 35 percent fine to microcrystalline limestone matrix. Fair porosity.
2630-2640	Dolomite, tan, fine crystalline, hard, low porosity.
2640-2660	Limestone, white, microcrystalline, chalky, low porosity. Fine white limestone pellets, tan recrystallized calcite prominent.
2660-2690	Limestone as 2600-2630 foot interval but low porosity.
2690-2720	Pelletal limestone, tan, coarsely pelletal (mostly <u>Dictyoconus</u> -sized forams), loosely bound by fine crystalline matrix. Highly porous. Forams recrystallized but only slightly altered.
2720-2730	Limestone as above but fine to medium pelletal. Add fine crystalline dark-gray dolomite prominent.

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Depth	Description
3030-3040	Three rock types: 55 percent dolomite as above. 25 percent dark-gray very fine crystalline hard dolomite. 20 percent white pelletal limestone, pellets medium-sized, bound with much micro-crystalline chalky limestone matrix. Low porosity.
3040-3060	Two rock types: 80 percent honey-colored fine crystalline dolomitized pelletal limestone, dolomitization complete, good porosity. 20 percent medium-gray fine crystalline dolomite with much intercrystalline porosity.
3060-3080	Dolomite as 3000-3010 interval.
3080-3090	Dolomite as above. Add trace of clear crystalline gypsum, as vug fillings.
3090-3110	Two rock types as 3040-3060 foot interval, roughly in same percentages as that interval. Good porosity.
3110-3130	Two rock types as above with 15 percent increase in gray dolomite, corresponding decrease in dolomitized limestone.
3130-3150	Dolomitized pelletal limestone, light-gray; pellets (preserved) were fine to medium-sized, matrix is very fine crystalline dolomite. Good porosity.
3150-3170	Two rock types: 70 percent dolomitized pelletal limestone as above. 30 percent tan dolomitized coarsely pelletal limestone, appears oolitic in part, dolomite fine crystalline. Both rock types highly porous.
3170-3180	Dolomite, tan to dark-gray, very fine crystalline, massive, hard, low porosity.
3180-3200	Bit change? Highly mixed sample, largely dolomite as above, but with several up-hole rock types.
3200-3230	Dolomitized pelletal limestone, honey-colored, fine to medium pelletal, dolomite fine crystalline, rock highly porous. Trace of poorly preserved <u>Borelis</u> sp.
3230-3260	Dolomitized pelletal limestone, light-brown to light-gray, finely pelletal, dolomite fine crystalline, rock highly porous. Trace of poorly preserved <u>Borelis</u> sp.
3260-3270	Highly mixed sample, several up-hole rock types. Only new lithology is dark-gray microcrystalline hard low-porosity dolomite.
3270-3300	Mostly dolomitized pelletal limestone as 3230-3260 foot interval. Light-gray silty dense dolomite prominent. Porosity fair in dolomitized limestone, low in dolomite.
3300-3320	Two rock types as above.
3320-3350	Dolomitized pelletal limestone as 3230-3260 foot interval. <u>Borelis</u> sp. common.
3350-3380	Dolomitized pelletal limestone as above.
3380-3410	Dolomitized pelletal limestone as above with <u>Borelis</u> sp. prominent.
3410-3440	Dolomitized pelletal limestone as 3320-3350 foot interval.
3440-3470	Dolomitized pelletal limestone as above with medium-gray silty dolomite common.
3470-3500	Dolomitized pelletal limestone as 3320-3350 foot interval with no <u>Borelis</u> noted.
3500-3530	Dolomite, light-gray, very fine to fine crystalline, fairly porous, most porosity intercrystalline.

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Depth	Description
3530-3560	Dolomite, dark brown with gray cast, fine to medium crystalline, euhedral, crystals loosely to firmly bound. Much vuggy and inter-crystalline porosity.
3560-3590	Two rock types: 65 percent dolomitized pelletal limestone as 3500-3530 foot interval. 35 percent dark-brown dolomite as above. White to brown anhydrite prominent, as vug fillings and lenses(?) in dolomitized limestone. Anhydrite has a brown "rind" where it is in contact with the dolomite.
3590-3620	Dolomite, light gray with brown cast, fine to medium crystalline, crystals poorly to well cemented. Much vuggy and intercrystalline porosity. Trace of white to dark-brown anhydrite, as vug fillings.
3620-3650	Dolomite, light tan to light gray, fine crystalline, dense, low porosity. Trace of scattered anhydrite as vug fillings.
3650-3680	Dolomite, light-gray, very fine crystalline, silty appearance, much pin-point porosity, but little of it is connected.
3680-3710	Dolomite as above. White to dark-brown anhydrite prominent as vug fillings.
3710-3740	Dolomite as above.
3740-3770	Dolomite, white, very fine crystalline to microcrystalline, hard, dense. Trace of scattered pinpoint porosity.
3770-3800	Dolomite as 3680-3710 with 25 percent of sample white (mostly) to dark-brown anhydrite, as vug fillings and lenses.
3800-3820	Dolomite as above with increase in anhydrite to 35 percent of sample. Floor of limestone aquifer system.
3820-3840	Dolomite as above with increase in anhydrite to 50 percent of sample.
3840-3850	65 percent anhydrite. 35 percent dolomite as above.
3850-3860	Practically all anhydrite.
3860-4970	Not examined.
4970-5000	Deepest sample in set. Still in very fine crystalline dolomite of Cedar Keys Limestone.