

M. Eocene
 Claiborne
 Undif.
 1140

Sand: very light olive-gray to light greenish-gray, very fine- to very coarse-grained, moderately sorted, coarser grains are rounded and polished, clear, rose, and amethyst quartz, with granular glauconite (up to 25% of sample) and pyrite, and Limestone; cream-colored, crystalline to dolomitic, fossiliferous, with foraminifers, 5Y7/1 to 5GY8/1
Nodosaria sp. at 1175-1180'
Cibicides sp. and planktonic foraminifers at 1190-1195'
Bolivina sp. at 1215-1220'
Guttulina sp. at 1215-1300'
Cassidulina sp. and Lituonella(?) sp. at 1305-1310' _____ 220 1360

Sand: greenish-gray, very fine- to coarse-grained, larger grains are rounded and polished, with granular pyrite and glauconite, trace of fine-grained heavy minerals, and Limestone; greenish-gray, dense, slightly dolomitic, fossiliferous, with foraminifers, 5GY6/1 to 5GY7/1
Ramulina sp. at 1370-1375' _____ 80 1440

T.D. 1440

WELL NO: GGS 468
 WELL NAME: C. T. Thurman #1
 COUNTY: Coffee

ALTTITUDE: 312 ft.
 TOTAL DEPTH: 4130 ft.
 DESCRIBED BY: GGS

22M004 314245082533901

SUMMARY:

THIS REPORT	DESCRIPTION	THICKNESS IN FEET	DEPTH IN FEET
In Miocene Altamaha 0	Sand: moderate orange pink to moderate brown, very fine- to very coarse-grained, iron stained, some frosted grains, with heavy minerals and iron cemented aggregates, and Clay; calcareous, indurated, silty, with rare lignite, 5YR8/4 to 5YR4/4 _____	50	50
	Sand: light yellowish-gray, very fine- to very coarse-grained, poorly sorted, with feldspar, heavy minerals, Clay; gray, indurated, calcareous, silty to sandy, silicified in part, and Dolomite; white, sucrosic, rare, 5Y8/1 to 5Y7/1 _____	50	100
	Sand: light brown, very fine- to very coarse-grained, poorly sorted, indurated in part, with calcareous and siliceous cements, and rare glauconite and pyrite, 10YR5/4 _____	10	110
	Silt: light brown, indurated, with calcareous cement, and Sand; poorly sorted, indurated in part, with calcareous cement, and traces of feldspar, biotite, and magnetite, 10YR6/4 _____	20	130

Miocene
Hawthorne
Undif.
130

Clay: very pale orange to moderate yellow/light olive, indurated, with calcareous cement, fossiliferous, with sponge spicules and diatoms, very rare glauconite, and heavy minerals, 10YR8/2 to 5Y6/6 -----	20	150
Clay: light yellowish-gray, indurated, slightly to extremely phosphatic, slightly sandy and micaceous, fossiliferous, with spicules and rare foraminifers, 5Y8/2 -----	40	190
Clay: yellowish-gray to dusky yellow, indurated, very sandy, micaceous, and interbedded Sand; very fine- to medium-grained, with heavy minerals, and Chert; olive and tan speckled, 5Y7/2 to 5Y7/1 -----	30	220
Clay: yellowish-gray to greenish-gray, indurated, phosphatic, sandy, and Sand; very fine- to very coarse-grained, with sparse heavy minerals, and pyrite, and Chert; olive-gray, 5Y8/1 to 5GY7/1 -----	180	400
Sand: as above, and Limestone; light bluish-gray, with oyster shell fragments, and Silt; indurated, calcareous, argillaceous, 5Y8/1 to 5B7/1 -----	50	450
Limestone: yellowish-gray to very pale orange, variously micritic, crystalline and dolomitic, silty, with phosphate grains, fossiliferous, with fragments of bryozoans, bivalves, and gastropods, crab claws, and foraminifers, 5Y7/1 to 10YR8/2 <u>Sorites</u> sp. at 450-460' Miliolids, <u>Miogypsina</u> sp. at 460 470' <u>Elphidium</u> sp. at 520 - 530' -----	150	600

Oligocene
Undif.
600

Dolomite: light olive-gray, very porous, sucrosic, 5Y6/1 -----	10	610
Limestone: very light olive-gray, slightly argillaceous and sandy, fossiliferous, with echinoid fragments, dolomitic in part, 5Y7/1 <u>Asterigerina</u> sp., <u>Pararotalia mexicana</u> at 610 - 620' -----	20	630
Limestone: yellowish-gray, porous, dolomitic, fossiliferous, with fragments of echinoids, bivalves, and bryozoans, and foraminifers, 5Y7/2 <u>Sphaerogypsina</u> sp., <u>Nummulites Panamensis</u> at 640 - 650' -----	20	650
Limestone: yellowish-gray, porous, argillaceous, sandy, fossiliferous, with echinoid, bryozoan, and algal(?) remains, and foraminifers, 5Y7/2 <u>Eponides</u> sp. at 670 - 680' -----	30	680
Limestone: as above, and Dolomite; brown, saccharoidal, and Sand; fine- to medium-grained, 5Y6/1 Chert at 690 - 700' <u>Lepidocyclina</u> sp. at 700 - 710' -----	30	710
Limestone: yellowish-gray, finely sandy, very fossiliferous, (sample is 70% <u>Nummulites</u> sp.) with traces of clay and dolomite, 5Y8/1 -----	10	720
No samples -----	10	730

Miocene	Clay: very pale orange to moderate yellow/light olive, indurated, with calcareous cement, fossiliferous, with sponge spicules and diatoms, very rare glauconite, and heavy minerals, 10YR8/2 to 5Y6/6	20	150
Hawthorne	Clay: light yellowish-gray, indurated, slightly to extremely phosphatic, slightly sandy and micaceous, fossiliferous, with spicules and rare foraminifers, 5Y8/2	40	190
Undif.	Clay: yellowish-gray to dusky yellow, indurated, very sandy, micaceous, and interbedded Sand; very fine- to medium-grained, with heavy minerals, and Chert; olive and tan speckled, 5Y7/2 to 5Y7/1	30	220
130	Clay: yellowish-gray to greenish-gray, indurated, phosphatic, sandy, and Sand; very fine- to very coarse-grained, with sparse heavy minerals, and pyrite, and Chert; olive-gray, 5Y8/1 to 5GY7/1	180	400
	Sand: as above, and Limestone; light bluish-gray, with oyster shell fragments, and Silt; indurated, calcareous, argillaceous, 5Y8/1 to 5B7/1	50	450
	Limestone: yellowish-gray to very pale orange, variously micritic, crystalline and dolomitic, silty, with phosphate grains, fossiliferous, with fragments of bryozoans, bivalves, and gastropods, crab claws, and foraminifers, 5Y7/1 to 10YR8/2		
	<u>Sorites</u> sp. at 450-460'		
	<u>Miliolids</u> , <u>Miogypsina</u> sp. at 460 470'		
	<u>Elphidium</u> sp. at 520 - 530'	150	600
Oligocene	Dolomite: light olive-gray, very porous, sucrosic, 5Y6/1	10	610
Undif.	Limestone: very light olive-gray, slightly argillaceous and sandy, fossiliferous, with echinoid fragments, dolomitic in part, 5Y7/1		
600	<u>Asterigerina</u> sp., <u>Pararotalia mexicana</u> at 610 - 620'	20	630
	Limestone: yellowish-gray, porous, dolomitic, fossiliferous, with fragments of echinoids, bivalves, and bryozoans, and foraminifers, 5Y7/2		
	<u>Sphaerogypsina</u> sp., <u>Nummulites Panamensis</u> at 640 - 650'	20	650
	Limestone: yellowish-gray, porous, argillaceous, sandy, fossiliferous, with echinoid, bryozoan, and algal(?) remains, and foraminifers, 5Y7/2		
	<u>Eponides</u> sp. at 670 - 680'	30	680
	Limestone: as above, and Dolomite; brown, saccharoidal, and Sand; fine- to medium-grained, 5Y6/1		
	Chert at 690 - 700'		
	<u>Lepidocyclina</u> sp. at 700 - 710'	30	710
	Limestone: yellowish-gray, finely sandy, very fossiliferous, (sample is 70% <u>Nummulites</u> sp.) with traces of clay and dolomite, 5Y8/1	10	720
	No samples	10	730

Limestone: light yellowish-gray, porous, sandy, fossiliferous, with echinoid fragments and tiny bivalves, and foraminifers, and Siltstone; olive-green, sandy, with rare glauconite, 5Y8/2		
<u>Nodosaria</u> sp. at 750 - 760' -----	30	760
No samples -----	10	770
Lithology as in 730 - 760' -----	10	780
Sand: yellowish-gray, very fine- to very coarse-grained, poorly to moderately sorted, with sparse heavy minerals, and Limestone; sandy, argillaceous, and Clay; indurated, phosphatic, sandy, 5Y7/2 -----	30	810
Clay: very light olive-gray, indurated, phosphatic, calcareous, sandy, and Sand; as above, 5Y7/1 -----	10	820
Limestone: light olive-gray, dolomitic, slightly phosphatic, sandy, and Clay; white, indurated, with calcareous and siliceous cements, phosphatic, micaceous, and Dolomite; olive-brown, saccharoidal, and Sand; as above, 5Y7/1		
<u>Lenticulina</u> sp. at 830-840'		
Chert at 850 - 860' -----	40	860
Limestone: very light olive-gray, dolomitic, fossiliferous, with fragments of pelecypods, bryozoans, and echinoids, small bivalves, and foraminifers, and Sand; medium- to coarse-grained, poorly sorted, and Dolomite; golden brown, saccharoidal, and Chert; olive-gray to tan, at certain levels, 5Y7/1 -----	70	930
Limestone: very light olive-gray, porous, coquinoïd, phosphatic, argillaceous, with fragments of bryozoans, echinoids, and gastropods, tiny bivalves, and foraminifers, and rare glauconite and pyrite, 5Y7/1		
<u>Globigerina eocaena</u> at 930 - 940'		
<u>Nodosaria</u> sp., <u>Lepidocyclina</u> sp. <u>Eponides</u> sp. at 940 - 950' -----	70	1000
U. Eocene/ M. Eocene Undif. 1000		
Limestone: as above, and Dolomite; golden-brown, saccharoidal, and Sand; fine- to medium-grained, poorly sorted, 5Y7/1		
Chert present at 1010 - 1020', 1060 - 1080'		
<u>Globulina</u> sp., bryozoan remains at 1060 - 1070' -----	90	1090
Limestone: light yellowish-gray, dense to porous, coquinoïd texture, variously dolomitic and argillaceous, sparsely glauconitic and pyritic, fossiliferous, with fish teeth, sponge spicules, fragments of echinoids and bryozoans, algal remains, and foraminifers, and Sand: fine- to medium-grained, and Dolomite; golden brown, saccharoidal, 5Y8/2		
<u>Elphidium</u> sp. at 1090 - 1100'		
<u>Lepidocyclina</u> sp., <u>Lenticulina</u> sp. at 1120 - 1130'		
<u>Helicostegina</u> sp. at 1130 - 1140'		
<u>Nummulites floridensis</u> , <u>Nodosaria</u> sp. at 1200 - 1210' -----	160	1250

	Sand: greenish-gray to yellowish-gray, medium-grained, poorly to moderately sorted, with heavy minerals, and Limestone and Dolomite; as above, with glauconite, 5GY6/1 to 5Y8/1		
	<u>Eponides</u> sp., <u>Nummulites</u> sp., <u>Lenticulina</u> sp., and <u>Lepidocyclus</u> sp. at 1260 - 1270'		
	<u>Helicostegina</u> sp. at 1290 - 1300' -----	70	1320
	No samples -----	30	1350
	Sand: same as 1250 - 1320' above, and Clay; yellowish-white, siliceous, indurated, very slightly calcareous, glauconitic, and Chert; light brown, 5GY6/1 to 5Y8/1 -----	140	1490
	No samples -----	10	1500
	Siltstone: greenish-gray to light greenish-gray, with calcareous and siliceous cements, sandy, glauconitic, and Clay; pale yellow, indurated, variously siliceous and dolomitic, and small amounts of glauconite, and pyrite, 5GY6/1 to 5G7/1		
	Radiolarians at 1510 - 1520'		
	Bivalve shells at 1580 - 1590' -----	90	1590
	No samples -----	250	1840
L/Eocene/ Paleocene* Undif. 1630 Cretaceous* Undif. 1820	Sand: very light gray, coarse- to very coarse-grained, moderately sorted, with clear, rose, and gray quartz grains, sparse heavy minerals, rare muscovite, 5YR8/2 -----	10	1850
	No samples -----	530	2380
	Sand: pale orange pink, coarse- to very coarse-grained, moderately sorted, with clear, rose, and gray quartz grains, few heavy minerals, muscovite, and pyrite, 5YR8/2 -----	10	2390
	No samples -----	1100	3490
	Sand: same as 2380 - 2390' above, with small amounts of Limestone and Siltstone (caved?) 5YR8/2 -----	10	3500
	No samples -----	40	3540
	Sand: as in 3490 - 3500' -----	10	3550
	No samples -----	530	4080
	Sand: dark yellowish-orange, coarse- to very coarse-grained, poorly sorted, iron stained, micaceous, and Siltstone; gray, glauconitic, dolomitic, and lignitic, 10YR6/6 -----	10	4090
	Sand: as above, with very weathered granite fragments, and Siltstone; red, micaceous, 10YR7/4 -----	20	4110
	No samples -----	20	4130

T.D. 4130

*Contact based on geophysical data