

GEORGIA
STATE DIVISION OF CONSERVATION
DEPARTMENT OF MINES, MINING AND GEOLOGY
GARLAND PEYTON, Director

THE GEOLOGICAL SURVEY
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WELL LOGS OF THE
COASTAL PLAIN OF GEORGIA

by

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Prepared cooperatively by the U. S. Geological Survey

ATLANTA
1961

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, subangular to subrounded, phosphatic	27	870
Marl: as above	8	873

Summary:

Miocene (undifferentiated)	178	178
Oligocene (undifferentiated)	180	358
In upper Eocene (Barnwell formation)	132	490
Middle Eocene (Lisbon formation)	333	823
Middle Eocene (Tallahatta formation)	50	873

Potential Water-Bearing Zones:

Sand: fine to coarse-grained	3	72
Sand: fine to coarse-grained	5	155
Sand: fine to coarse-grained	16	358
Sand: fine to coarse-grained	13	550
Sand: fine to coarse-grained	10	682
Sand: fine to coarse-grained	11	823
Sand: fine to coarse-grained	27	870

Remarks:

1. The limestones noted above are dense, crystalline in texture, hence are more or less nonporous. Such limestones, therefore, cannot be relied upon for ground-water supplies.

2. The best aquifers lie below the total depth penetrated by this well and are of Late Cretaceous age. The water-bearing sands enumerated above are thought to be satisfactory for domestic needs only.

EMANUEL COUNTY

Location: Approximately 12 mi. northeast of Swainsboro, west side of Highway 56, at school house Well No.: GGS 372
 Owner: No. 1 Summertown Consolidated School Elev.: 255
 Driller: Virginia Supply and Well Company
 Drilled: 1954

Thickness (feet)	Depth (feet)
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Miocene (Undifferentiated):

Clay: bluish-gray to tan to red (mottled), blocky, very sandy.....	25	25
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	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Marl: light-gray to pale-green, blocky, silty, fossiliferous (some Foraminifera); limestone, light-gray to white, dense, saccharoidal, sandy, coarsely but sparsely glauconitic, fossiliferous (fragments, casts and molds of macroshells, echinoid and bryozoan remains)	15	40
<i>Textularia conica</i> , <i>Spiroplectammina mississippiensis</i> , <i>Discorbis assulata</i> , <i>Reussella</i> sp., <i>Elphidium texanum</i> , <i>Valvulineria jacksonensis</i> , <i>Rotalia</i> sp., <i>Nonion advena</i> , <i>Nonion inexcavatus</i> , <i>Alabama mississippiensis</i> , <i>Cibicides americanus</i> var., <i>Cibicides mississippiensis</i> , <i>Cibicides</i> cf. <i>C. refulgens</i> at 25-40.		
Limestone: white to cream, rather dense, saccharoidal, porous ¹ , sandy, sparsely phosphatic, fossiliferous (fragments, casts and molds of macroshells, some echinoid and bryozoan remains, and Foraminifera)	185	225
<i>Asterigerina subacuta</i> , <i>Rotalia byramensis</i> var., <i>Discorbis hemisphaerica</i> , <i>Reussella</i> cf. <i>R. oligocenica</i> at 40-75.		

Upper Eocene: Barnwell Formation:

Marl: light-gray, somewhat indurated, sparsely glauconitic, sandier with depth, fossiliferous (Foraminifera and Ostracods); interbedded limestone, as above	145	370
<i>Textularia hockleyensis</i> , <i>Textularia dibollensis</i> var., <i>Nonion advena</i> , <i>Nonion inexcavatus</i> , <i>Valvulineria jacksonensis</i> , <i>Discorbis assulata</i> , <i>Angulogerina ocalana</i> , <i>Cibicides americanus</i> , <i>Cibicides mississippiensis</i> , <i>Cibicides</i> cf. <i>C. cocoaensis</i> , <i>Cibicides lobatulus</i> at 225-275.		
<i>Discorbis assulata</i> , <i>Nonion advena</i> , <i>Nonion inexcavatus</i> , <i>Valvulineria jacksonensis</i> prominent at 275-350.		
<i>Discorbis cocoaensis</i> , <i>Nonion advena</i> , <i>Nonion inexcavatus</i> , <i>Reussella eocena</i> prominent at 350-370.		

Summary:

Miocene (undifferentiated)	25	25
Oligocene (undifferentiated)	200	225
Upper Eocene (Barnwell formation)	145	370

Potential Water-Bearing Zones:

Limestone	185	225
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¹Cavities represent former macroshells that have been dissolved away by percolating ground water.