

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

---

**THE GEOLOGICAL SURVEY**  
Bulletin Number 70

---

**WELL LOGS OF THE**  
**COASTAL PLAIN OF GEORGIA**

by

**Stephen M. Herrick, Geologist**  
United States Geological Survey



Prepared cooperatively by the U. S. Geological Survey

---

**ATLANTA**  
**1961**

## BURKE COUNTY

Location: 3 mi. north of Waynesboro on Briar Creek

Well No.: GGS 139

Owner: No. 1 John Thompson

Elev.: 199

Driller: J. Rowell

Drilled: August 1946

	Thickness (feet)	Depth (feet)
No samples .....	44	44
<b>In Middle Eocene: Claiborne Group (Undifferentiated):</b>		
Limestone: light-gray, dense (much calcitized), sandy, somewhat carbonaceous, finely glauconitic, phosphatic, fossiliferous at depth (Ostracods, Foraminifera, and macroshells); interbedded marl, light-gray, glauconitic .....	96	140
Clay, light-gray, somewhat indurated, finely glauconitic, at 100-110.		
Macroshells common at 120-140.		
No samples .....	30	170
Sand: fine to coarse-grained, coarsely glauconitic .....	?	170

## Summary:

No samples .....	44	44
In middle Eocene (Claiborne group, undifferentiated) .....	126	170

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained .....	30	140
Sand: fine to coarse-grained .....	?	170

## BURKE COUNTY

Location: 2.5 mi. east of Greens Cut

Well No.: GGS 220

Owner: No. 3 well Three Creeks Oil Company

Drilled: May 1923

	Thickness (feet)	Depth (feet)
<b>Residuum:</b>		
Clay: reddish-brown, very sandy, limonitic; some residual limestone .....	30	30

	Thickness (feet)	Depth (feet)
<b>Upper Eocene: Jackson Group: Barnwell Formation:</b>		
Limestone: white, dense, crystalline, sandy, sparsely phosphatic, fossiliferous (macroshells, echinoid and bryozoan remains, and some Foraminifera) .....	45	75
<i>Elphidium texanum</i> , <i>Nonion inexcavatus</i> , <i>Valvulineria jacksonensis</i> , <i>Cibicides americanus</i> var. <i>antiquus</i> at 30-75.		

**Middle Eocene: Claiborne Group: Lisbon Formation:**

Marl: light-gray to pale, yellowish-green, sandy, limey, hard lime nodules, fossiliferous at certain levels (echinoid and bryozoan remains, Ostracods, and Foraminifera) .....	54	129
<i>Spiroplectammina mississippiensis</i> var., <i>Textularia dibolensis</i> , <i>Nonion inexcavatus</i> , <i>Nonion advena</i> , <i>Discorbis georgiana</i> , <i>Siphonina claibornensis</i> , <i>Valvulineria danvillensis</i> var. <i>gyroidinoides</i> , <i>Cibicides pseudoungerianus</i> var. <i>lisbonensis</i> , <i>Cibicides americanus</i> var. <i>antiquus</i> , <i>Cibicides danvillensis</i> at 116-118.		
Clay: dark-green, blocky, somewhat indurated and tough, sandy .....	16	145
Sand: fine to medium-grained; clay, light-gray to dark-brown, block, carbonaceous, finely disseminated flakes of mica .....	16	161
Clay: dark-brown to black, lignitic, micaceous, sandy, coarse grains of sand .....	25	186
Clay: as above, but light-gray, very sandy .....	9	195

**Upper Cretaceous: Tuscaloosa Formation:**

Sand: coarse-grained, angular, arkosic, many grains coated with white kaolin; interbedded clay (or kaolin), white to gray to red to purple (mottled), micaceous, somewhat sandy .....	644	839
Clay: light-gray to tan to olive-green to red (mottled), sideritic, micaceous, greasy; interbedded sand, very coarse-grained, angular, arkosic .....	86.7	925.7

**Summary:**

Residuum .....	30	30
Upper Eocene (Barnwell formation) .....	45	75
Middle Eocene (Lisbon formation) .....	120	195
Upper Cretaceous (Tuscaloosa formation) .....	730.7	925.7

	Thickness (feet)	Depth (feet)
<b>Potential Water-Bearing Zones:</b>		
Sand: fine to coarse-grained.....	3	129
Sand: fine to coarse-grained.....	13	208
Sand: fine to coarse-grained.....	13	312
Sand: fine to coarse-grained.....	25	356
Sand: fine to coarse-grained.....	23	421
Sand: fine to coarse-grained.....	34	538

**Remarks:**

Other water-bearing sands are present below depth of 538 (above); but samples are not of sufficient excellence to permit delineation.

**BURKE COUNTY**

Location: Approximately 2.5 mi. east of Greens Cut

Well No.: GGS 316

Owner: No. 2 well Three Creeks Oil Company

Drilled: 1923

	Thickness (feet)	Depth (feet)
No samples.....	128	128

**In Middle Eocene: Claiborne Group: Lisbon Formation:**

Marl: cream to pale yellowish-green, somewhat sandy, glauconitic, limy, with hard lime nodules, fossiliferous (macroshells, echinoid and bryozoan remains, Ostracods, and Foraminifera).....

62 190

*Nonion advena*, *Discorbis georgiana*, *Gyroldina soldanii* var., *Cibicides americanus* var. *antiquus*, *Cibicides pseudo-ungarianus* var., *Cibicides danvillensis*, *Cibicides westi* at 128-144.

Sand: fine to coarse-grained, subangular, sparsely phosphatic.....

24 214

Sand: fine to coarse-grained, subrounded; clay, dark-green, somewhat indurated and fissile, micaceous; claystone, dark-brown, dense, cherty.....

8 222

Sand: as above; clay, dark-green to dark-brown to black, somewhat fissile, micaceous.....

56 278

**In Upper Cretaceous: Tuscaloosa Formation:**

Sand: fine to coarse-grained, subangular, arkosic, many grains coated with red clay.....

40 318