### 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

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Prepared cooperatively by the U. S. Geological Survey

ATLANTA 1961

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		î
Sand: fine to medium-grained	. 10	130
Sand: fine to medium-grained	. 20	200
Sand <sup>1</sup> : fine to coarse-grained	80,	400

#### Remarks:

Samples of very poor quality.

### JEFFERSON COUNTY

Location: Northeast of Wadley at Smith's Fish Pond

Owner: No. 1 W. P. Smith

Driller: M. M. Gray Drilling Company

Well No.: GGS 532

Elev.: 1802

Drilled: June 1957		
	Thickness (feet)	Depth (feet)
•		
Pliocene to Recent (Undifferentiated):	•	
Sand: fine to coarse-grained, angular, arkosic; clay, brick-red, sandy, limonitic	30	30
Oligocene(?) (Undifferentiated):	*/	
Limestone: white, crystalline, saccharoidal, very sandy, coarsely glauconitic, fossiliferous (fragments and molds of megafossils, and echinoid and bryozoan remains); interbedded sand, fine to medium-grained	35	65
Upper Eocene: Jackson Group: Barnwell Formation:		
Marl: gray to light-brown, silty, indurated at certain levels, carbonaceous, fossiliferous (Foraminifera); interbedded sand, fine to coarse-grained; limestone, light-gray, somewhat saccharoidal, sandy, sparsely phosphatic, glauconitic, fossiliferous (fragments and molds of megafossils)		250
Limestone prominent at 70-80.  Valvulineria jacksonensis at 80-90.  Nonion advena at 100-110.  Discorbis assulata at 140-150.		
Sand at 220-250.	. /	

<sup>&</sup>lt;sup>1</sup>Additional sand aquifers occur below 400', but owing to poor samples cannot be delineated. 
<sup>2</sup>Average elevation based on Georgia State Highway Maps.

Thickness Depth (feet) (feet)	
Middle Eocene: Claiborne Group (Undifferentiated):	
Marl: gray to yellowish-green, somewhat indurated, phosphatic (finely disseminated), glauconitic at depth, fossiliferous (macroshells, Radiolaria, Ostracods and Foraminifera); interbedded sand, fine to coarse-grained, angular, phosphatic; and limestone, white, sandy, coarsely glauconitic, fossiliferous (macroshells, echinoid and bryozoan remains) 70 320	
Cibicides americanus var., Radiolaria at 250-260.	
Asterigerina texana, Cibicides westi at 280-290.	
Macroshells prominent at 290-300.	1
Sand: fine to coarse-grained, angular, phosphatic 90 410	
Summary:	
Pliocene to Recent (undifferentiated) 30 30 Oligocene (?) (undifferentiated) 35 65 Upper Eocene (Barnwell formation) 185 250 Middle Eocene (Claiborne group, undifferentiated) 160 410	
Potential Water-Bearing Zones:	
Sand: fine to coarse-grained 30 250 250 30 410	
JEFFERSON COUNTY	
Location: In Louisville  Owner: City of Louisville  Driller: Virginia Supply and Well Company  Drilled: April 1958  Thickness Depth (feet)  (feet)	
	,
Pliocene to Recent (Undifferentiated):	
Sand: fine to coarse-grained, angular, arkosic; and clay, dark-brown, lignitic	
Sand: fine to coarse-grained, angular, arkosic; and clay, dark-	
Sand: fine to coarse-grained, angular, arkosic; and clay, dark- brown, lignitic25	
Sand: fine to coarse-grained, angular, arkosic; and clay, dark-brown, lignitic 25  Upper Eocene: Jackson Group: Barnwell Formation:  Marl: gray to yellowish-green, silty, fossiliferous (Ostracods	
Sand: fine to coarse-grained, angular, arkosic; and clay, dark-brown, lignitic	

<sup>&</sup>lt;sup>1</sup>Average elevation based on Georgia State Highway Maps.