

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

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WELL LOGS OF THE
COASTAL PLAIN OF GEORGIA

by

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ATLANTA
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Remarks:

Owing to unusually deep dissection (rugged topography), it is possible that the sands above 538 feet may be dry through ground-water leakage (spring discharge). Hence, in order to be safe, water wells in this area should be completed in the more deeply-buried sands of Tuscaloosa age.

CLAY COUNTY

Location: 0.9 mi. east of intersection of Highways 37 and 39, 0.4 mi. north of Highway 37, in Fort Gaines
 Well No.: GGS 402
 Elev.: 390
 Owner: No. 1 Speight School
 Driller: Layne-Atlantic Company
 Drilled: August 1954

	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Lisbon Formation:		
Sand: fine to coarse-grained; clay, tan to red (mottled), sandy, limonitic; some limestone, yellow, much leached, iron-stained, fossiliferous at depth (bryozoan remains and Foraminifera)	27	27
Limestone: as in above sample	18	45
<i>Cibicides westi</i> at 27-35.		
Clay: yellowish-green, sandy, somewhat indurated; some limestone, gray, dense, crystalline, sandy, fossiliferous (macroshells)	21	66
Clay: yellowish-green, with tan to red streaks (somewhat mottled), blocky; micaceous; some limestone, as above.....	20	86
Tallahatta Formation:		
Clay: yellowish-green to light-gray, blocky, somewhat indurated and tough at depth, micaceous, fossiliferous (some Foraminifera); limestone, light-gray, dense, sandy, coarsely glauconitic	24	110
<i>Cibicides tallahattensis</i> , <i>Valvulineria jacksonensis</i> var. at 86-110.		
Sand: fine to coarse-grained, subangular grains, sparsely phosphatic, indurated at depth, fossiliferous (a coquina).....	80	190
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, sandy, carbonaceous, micaceous, pyritiferous and fossiliferous at depth (some Foraminifera); limestone, gray, dense, coarsely glauconitic, sandy.....	19	209
<i>Eponides dorfi</i> , <i>Anomalina</i> sp., <i>Asterigerina</i> sp. at 190-209.		

	Thickness (feet)	Depth (feet)
Clay: as above	103	312
Sand: fine to medium-grained, subangular, abundantly glauconitic; some clay, as above.....	20	332

Paleocene: Midway Group: Clayton Formation:

Clay: gray to tan to red (mottled), sandy, micaceous, bauxitic(?); sand, fine to coarse-grained, subangular, scattered grains of pale-green quartz.....	18	350
Clay (or fuller's earth): light-gray, sandy, carbonaceous, micaceous	20	370
Indurated sand: fine-grained, somewhat argillaceous, glauconitic, fossiliferous (Foraminifera).....	20	390
<i>Operculinoides catenula</i> common at 385-391.		
Limestone: light-gray, somewhat argillaceous, sandy, fossiliferous (casts and fragments of megafossils, bryozoan remains, Ostracods, and Foraminifera).....	110	500

Summary:

Middle Eocene (Lisbon formation)	86	86
Middle Eocene (Tallahatta formation)	104	290
Lower Eocene (Wilcox group, undifferentiated)	142	332
Paleocene (Clayton formation)	168	500

Potential Water-Bearing Zones:

Sand: fine to coarse-grained	80	190
Limestone	110	500

Remarks:

A fault, postulated on the different sections penetrated by this well and well 435, is indicated between this well and well 435. Accordingly, this well, on account of its much thicker, much more complete section, probably represents the down-thrown side (of the fault). More drilling is needed before the amount of throw, or displacement, can be determined.