

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

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**THE GEOLOGICAL SURVEY**  
Bulletin Number 70

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

by

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United States Geological Survey



Prepared cooperatively by the U. S. Geological Survey

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**ATLANTA**  
**1961**

	Thickness (feet)	Depth (feet)
Sand: medium-grained, glauconitic, micaceous .....	15	2,935
Sand: coarse-grained, angular, massive, arkosic; interbedded clay, brick-red to dark-green (mottled), highly micaceous, sandy .....	365	3,300 <sup>1</sup>

#### Summary:

No samples .....	280	280
In middle Eocene (Tallahatta formation) .....	185	465
Lower Eocene (Wilcox group, undifferentiated) .....	93	558
No samples .....	17	575
In Paleocene (Clayton formation) .....	195	770
Upper Cretaceous (Providence and Ripley formations) .....	330	1,100
Upper Cretaceous (Cusseta and Blufftown formations) .....	1,265	2,365
Upper Cretaceous (Eutaw formation) .....	140	2,505
Upper Cretaceous (Tuscaloosa formation) .....	795	3,300

#### Potential Water-Bearing Zones:

Sand: fine to coarse-grained .....	85	385
Limestone: .....	135	750
Sand: fine to coarse-grained .....	20	770

#### DOUGHERTY COUNTY

Location: 3.5 mi. west of Dougherty-Worth County Well No.: GGS 248  
 line and 0.5 mi. south of Atlantic Coast Line R.R. Elev.: 223  
 Owner: No. 1 U. S. Marine Corps  
 Driller: Layne-Atlantic Company  
 Drilled: 1951

	Thickness (feet)	Depth (feet)
<b>Residuum:</b>		
Sand: fine to medium-grained, limonitic; clay, mottled, sandy .....	20	20
Clay: gray to brown (mottled), sandy, limonitic, and frag- ments of residual limestone .....	20	40
No samples .....	12	52

<sup>1</sup>Not reported below 3,300.

	Thickness (feet)	Depth (feet)
<b>In Upper Eocene: Jackson Group: Ocala Limestone:</b>		
Limestone: white to cream, dense (much calcitized), sandier and glauconitic at depth, fossiliferous (macroshells, bryozoan remains, and some Foraminifera) .....	256	308

*Operculinoides* sp. at 70-90.

*Argyrotheca* sp. at 90-110.

*Gypsina globula* at 185-210.

*Amphistegina pinarensis* var. at 270-290.

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

Sand: fine to coarse-grained, sparsely phosphatic, fossiliferous (macroshells at certain levels); interbedded marl, light-gray to cream, somewhat sandy, finely glauconitic, fossiliferous (bryozoan remains, Ostracods and Foraminifera); thin beds of limestone, light-gray, dense (much calcitized), sandy, finely glauconitic; fossiliferous (some macro- and microfossils) .....	92	400
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*Cibicides pseudoungerianus* var. *lisbonensis* at 311-326.

*Asterocyclina monticellensis*, *Siphonina claibornensis* at 326-329.

Fine to coarse-grained, phosphatic sand at 350-360.

**Tallahatta Formation:**

Sand: fine to coarse-grained, phosphatic, fossiliferous (abundant macroshells); interbedded stringers of limestone, light-gray, sandy, coarsely glauconitic; beds of marl, light-gray to yellowish-green, somewhat fissile, sandy, carbonaceous, micaceous, fossiliferous (some Foraminifera) .....	240	640
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Fine to coarse-grained, phosphatic sand at 435-450.

Fine to coarse-grained, phosphatic sand at 475-538.

*Valvulineria jacksonensis* var., *Valvulineria danvillensis* var., *Cibicides tallahattensis* at 538-554.

Fine to coarse-grained, phosphatic sand at 550-590.

Limestone, light-gray, sandy, dense, coarsely glauconitic, fragments and molds of macroshells at 600-610.

Limestone as above at 630-640.

Thickness  
(feet)      Depth  
(feet)

**Lower Eocene: Wilcox Group (Undifferentiated):**

Marl: dark-gray, silty, carbonaceous, micaceous, pyritiferous, fossiliferous (Foraminifera at certain levels) .....	130	770
<i>Cibicides howelli</i> , <i>Cibicides blaspiedi</i> at 656-676.		
<i>Eponides dorfi</i> , <i>Alabama wilcoxensis</i> , <i>Cibicides howelli</i> , <i>Globorotalia</i> sp. at 758-770.		

**Paleocene: Midway Group: Clayton Formation:**

Sand: fine-grained to coarser-grained at depth; interbedded marl, dark-gray to black, finely micaceous, fossiliferous (Ostracods and Foraminifera); limestone, light-gray, dense (highly calcitized), sandy, glauconitic, fossiliferous (macroshells, bryozoan remains, and some Foraminifera) .....	80	850
Limestone, light-gray to white, sandy, coarsely glauconitic, macroshells at 770-784.		
<i>Robulus alabamensis</i> , <i>Eponides lotus</i> , <i>Cibicides alleni</i> , <i>Anomalina acuta</i> at 799-819.		
Limestone, light-gray, dense, sandy, coarsely glauconitic, macroshells at 823-834.		
Limestone: light-gray, dense (much calcitized) glauconitic, somewhat sandy, fossiliferous (macroshells, bryozoan remains, and some Foraminifera) .....	90	940
Sand: fine to coarse-grained, angular, iron-stained.....	26	966

**Upper Cretaceous: Providence and Ripley Formations (Undifferentiated):**

Marl: bluish-gray, silty, micaceous, pyritiferous, fossiliferous (macroshells, Ostracods and Foraminifera) .....	34	1,000
<i>Anomalina pseudopapillosa</i> at 959-974.		
Sand: fine to coarse-grained, indurated.....	25	1,025

**Summary:**

Residuum .....	40	40
No samples .....	12	52
In upper Eocene (Ocala limestone) .....	256	308
Middle Eocene (Lisbon formation) .....	92	400
Middle Eocene (Tallahatta formation) .....	240	640
Lower Eocene (Wilcox group, undifferentiated) .....	130	770
Paleocene (Clayton formation) .....	196	966
Upper Cretaceous (Providence and Ripley, undifferentiated) .....	59	1,025

	Thickness (feet)	Depth (feet)
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## Potential Water-Bearing Zones:

Limestone .....	256	308
Sand: fine to coarse-grained .....	10	360
Sand: fine to coarse-grained .....	15	450
Sand: fine to coarse-grained .....	63	538
Sand: fine to coarse-grained .....	40	590
Limestone .....	90	940
Sand: fine to coarse-grained .....	26	966
Sand: fine to coarse-grained, indurated .....	25	1,025

## DOUGHERTY COUNTY

Location: 5.12 mi. west of Dougherty-Worth County  
line and 1 mi. south of Atlantic Coast Line R.R.

Well No.: GGS 261

Elev.: 204

Owner: No. 3 U. S. Marine Corps

Driller: Layne-Atlantic Company

Drilled: February 1952

	Thickness (feet)	Depth (feet)
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No samples .....	20	20
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## In Residuum:

Clay: mottled, sandy, limonitic, and fragments of residual limestone .....	20	40
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## Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: white to cream, fossiliferous (macroshells, bryo- zoan remains, Ostracods, and some Foraminifera); denser (more calcitized) and sandier with depth .....	200	240
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## Middle Eocene: Claiborne Group: Lisbon Formation:

Sand: fine to coarse-grained, sparsely phosphatic, fossilifer- ous at certain levels (macroshells); interbedded marl, light-gray to cream, somewhat sandy, finely glauconitic, fossiliferous (bryozoan remains, Ostracods, and Foramini- fera); limestone, light-gray, sandy, finely glauconitic, fos- siliferous (macroshells and some Foraminifera) .....	110	350
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*Cibicides westi* at 270-290.

*Operculinoides* sp., *Asterocyclina* sp., *Cibicides pseudounger-  
ianus* var. *lisbonensis* at 290-310.