

**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)
Limestone: light-gray, extremely dense and crystalline (highly calcitized), fossiliferous (as above) .....	90	720
<i>Pseudophragmina</i> sp., <i>Lepidocyclina</i> sp. at 700-710.		
Limestone: white, soft and chalky in streaks; otherwise considerably calcitized and crystalline, fossiliferous (as above)....	100	820
<i>Heterostegina ocalana</i> at 760-770. <i>Amphistegina pinarensis</i> var. at 770-780.		
Limestone: light-gray, extremely dense and crystalline, as interval 630-720 .....	20	840

## Summary:

No samples .....	40	40
In Pliocene to Recent (undifferentiated) .....	55	95
Miocene (undifferentiated) .....	420	515
Oligocene (undifferentiated) .....	75	590
No samples .....	20	610
In upper Eocene (Ocala limestone) .....	230	840

## Potential Water-Bearing Zones:

Limestone .....	325	840
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## APPLING COUNTY

Location: 2,433 ft. north, 2,796 ft. west of southeast corner of Land Lot 522, 2nd Land District  
 Well No.: GGS 148  
 Elev.: 229  
 Owner: No. 1 W. E. Bradley  
 Driller: Felsenthal and Weatherford  
 Drilled: July 1947

	Thickness (feet)	Depth (feet)
<b>Miocene (Undifferentiated):</b>		
Sand: fine to medium-grained, angular .....	10	10
No samples .....	50	60
Clay: pale-green, sandy; interbedded sand, fine to medium-grained, angular, phosphatic at depth .....	300	360
Jet-black phosphatic pebbles abundant at 180-210.		
Limestone: cream, somewhat saccharoidal and crystalline, rather dense, sandy, phosphatic, fossiliferous at depth (macroshells); scattered beds of sand, as above .....	120	480
Macroshells at 450-470.		
Limestone: as above, but somewhat dolomitized .....	40	520

	Thickness (feet)	Depth (feet)
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**Oligocene (Undifferentiated):**

Limestone: light-gray, much calcitized, massive, nodular, fossiliferous (some megafossils, echinoid and bryozoan remains, and Foraminifera) .....	120	640
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*Rotalia mexicana* var. at 540-550.*Gypsina globula*<sup>1</sup>, *Asterocyclina* sp. at 560-570.*Dictyoconus*<sup>1</sup> sp. at 580-590.**Upper Eocene: Jackson Group: Ocala Limestone:**

Limestone: cream, more porous than above, fossiliferous (macroshells, echinoid and bryozoan remains, and Foraminifera) .....	120	760
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*Lepidocyclina* sp., *Camerina* sp. at 640-650.*Operculinoides ocalanus*, *Asterocyclina* sp. at 650-660.*Camerina striatoreticulata* at 700-710.

Limestone: as above, but much calcitized, crystalline, massive, fossiliferous (Foraminifera at certain levels) .....	160	920
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*Operculina mariannensis* at 780-790.

Various species of larger Foraminifera abundant at 800-900.

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

Limestone: cream, much calcitized, somewhat granular in texture, rather massive, coarsely glauconitic at depth, cherty at certain levels; interbedded limestone, gray, dense, crystalline, massive, sandy, glauconitic (finely disseminated), fossiliferous (macroshells and bryozoan remains at certain horizons); sand, fine to medium-grained, angular, somewhat phosphatic .....	430	1,350
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*Cibicides westi* at 1260-1270.*Operculinoides* sp. at 1300-1310.

Sand: fine to coarse-grained, angular; marl, gray, somewhat carbonaceous, micaceous, glauconitic .....	80	1,430
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Limestone: white, dense, much calcitized, coarsely glauconitic, fossiliferous; dolomitic limestone, dark-brown, saccharoidal, glauconitic .....	100	1,530
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Macroshells common to abundant at 1450-1530.

<sup>1</sup>Reworked(?) fossil of middle Eocene age.

	Thickness (feet)	Depth (feet)
<b>Tallahatta Formation:</b>		
Sand: fine to coarse-grained, angular, abundantly glauconitic; relatively thin stringers of marl, dark-gray, silty, glauconitic, fossiliferous (Foraminifera at certain horizons).....	160	1,690
<i>Cibicides tallahattensis</i> at 1570-1580.		
<i>Valvulineria jacksonensis</i> var. at 1600-1610.		
<b>Lower Eocene and Paleocene (Undifferentiated):</b>		
Marl: gray, silty, carbonaceous, micaceous, glauconitic, fossiliferous (Foraminifera) .....	70	1,760
<i>Eponides dorfi</i> , <i>Globorotalia wilcoxensis</i> at 1715-1538.		
No samples .....	30	1,790
Limestone: gray, much calcitized, dense, crystalline, massive, glauconitic .....	90	1,880
Sand: fine to medium-grained, angular; interbedded marl, dark-gray, somewhat fissile, carbonaceous, micaceous (finely disseminated); and limestone, as above .....	215	2,095
<b>Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):</b>		
Sand: fine to medium-grained, angular; interbedded marl, gray, silty, glauconitic, micaceous, pyritiferous, fossiliferous (macroshells, Ostracods, and Foraminifera at certain levels) .....	215	2,310
<i>Anomalina pseudopapillosa</i> at 2155-2170.		
<i>Globotruncana</i> sp., <i>Gaudryina</i> sp. at 2275-2290.		
<i>Dorothia</i> sp., <i>Guembelina striata</i> at 2300-2310.		
Marl: gray to brown, more fissile (shaley) with depth, silty, micaceous, carbonaceous, pyritiferous, fossiliferous (mega-fossils, Ostracods, and Foraminifera at certain levels) .....	440	2,750
<i>Cibicides harperi</i> at 2480-2490.		
<i>Planulina taylorensis</i> at 2580-2590.		
Sand: fine to medium-grained, angular, phosphatic; interbedded marl, as above .....	150	2,900
Marl: brown, fissile, silty, carbonaceous, micaceous, pyritiferous, fossiliferous (Foraminifera) .....	50	2,950

	Thickness (feet)	Depth (feet)
<i>Inoceramus</i> prisms common, <i>Kyphopyxa christneri</i> at 2900-2910.		
Sand: fine to coarse-grained, angular, somewhat indurated at certain levels, micaceous, phosphatic, fossiliferous, (macroshells, a coquina at certain horizons) .....	100	3,050
<b>Tuscaloosa Formation:</b>		
Sand: fine to coarse-grained, angular, glauconitic, fossiliferous (macroshells) .....	70	3,120
Sand: dark-gray to black, fissile, carbonaceous (finely disseminated); interbedded sand, as above .....	200	3,320
Sand: fine-grained, indurated, micaceous, glauconitic .....	100	3,420
Sand: coarse-grained, massive, angular, arkosic; clay, dark-brown to brick-red, waxy, micaceous, sandy .....	540	3,960
Siderite nodules abundant at 3480-3490.		
<b>Lower Cretaceous (?) (Undifferentiated):</b>		
Clay: pale-green to brick-red, waxy, highly micaceous, sandy; interbedded sand, coarse-grained, angular, arkosic .....	115	4,075
<b>Basement Complex (Undifferentiated):</b>		
Crystalline rock, undifferentiated .....	23	4,098
<b>Summary:</b>		
Miocene (undifferentiated) .....	520	520
Oligocene (undifferentiated) .....	120	640
Upper Eocene (Ocala limestone) .....	280	920
In middle Eocene (Lisbon formation) .....	610	1,530
In middle Eocene (Tallahatta formation) .....	160	1,690
Lower Eocene and Paleocene (undifferentiated) .....	405	2,095
Upper Cretaceous (post-Tuscaloosa undifferentiated) .....	955	3,050
Upper Cretaceous (Tuscaloosa formation) .....	910	3,960
Lower Cretaceous (?) (undifferentiated) .....	115	4,075
Basement complex (undifferentiated) .....	23	4,098
<b>Potential Water-Bearing Zones:</b>		
Limestone .....	320	860
Sand: fine to coarse-grained .....	50	1,430