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

THE GEOLOGICAL SURVEY
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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)
Sand: fine to coarse-grained, pyritiferous, micaceous, interbedded marl, gray, silty, chalky, micaceous, pyritiferous	63	876
Marl: bluish-gray, chalky, micaceous, pyritiferous, fossiliferous (macroshells, Ostracods, and Foraminifera); interbedded sand, fine to medium-grained, pyritiferous, micaceous	99	975

Globotruncana sp., *Gaudryina rudita* at 948-975.

Summary:

Residuum	20	20
Upper Eocene (Ocala limestone)	130	150
Middle Eocene (Lisbon formation)	60	210
Middle Eocene (Tallahatta formation)	234	444
Lower Eocene (Wilcox group, undifferentiated)	126	570
Paleocene (Clayton formation)	166	736
Upper Cretaceous (Providence and Ripley, undifferentiated)	239	975

Potential Water-Bearing Zones:

Limestone	130	150
Sand	35	245
Sand: fine to coarse-grained	92	412
Sand: fine to coarse-grained	19	467
Sand: fine to coarse-grained	52	570
Limestone	108	706
Sand: fine to coarse-grained	30	736
Limestone	29	813
Sand: fine to coarse-grained	63	876

EARLY COUNTY

Location: About 6 mi. northwest of Saffold, Land Lot 406, 26th Land District
Owner: No. 1 A. C. Chandler
Driller: Mont Warren et al
Drilled: October 1943

Well No.: GGS 121
Elev.: 187 (derrick floor)

	Thickness (feet)	Depth (feet)
No samples	615	615

In Paleocene: Midway Group: Clayton Formation:

Indurated sand: gray, fine-grained, somewhat argillaceous, glauconitic, fossiliferous (casts of megafossils at certain

	Thickness (feet)	Depth (feet)
levels, Ostracods, and Foraminifera); sand; medium to coarse-grained, angular, glauconitic, grains of light-green quartz	15	630
Indurated sand: as above; interbedded marl, dark-gray to black, somewhat fissile, carbonaceous, micaceous (finely disseminated); limestone, cream, dense, crystalline, glauconitic, sandy, fossiliferous (some macroshells, bryozoan remains, Ostracods, and Foraminifera)	315	945
Operculinoides catenula, Pseudophragmina stephensoni at 660-675.		
Robulus midwayensis at 675-690.		
Robulus midwayensis common at 750-765.		
Limestone: gray to cream, dense, crystalline, glauconitic, sandy, cherty at certain levels, fossiliferous (some macroshells, bryozoan remains, Ostracods, and Foraminifera); interbedded marl, dark-gray to black, carbonaceous, micaceous (finely disseminated)	150	1,095
Marl: gray, somewhat indurated, fissile, carbonaceous, micaceous, fossiliferous (Ostracods and Foraminifera); interbedded limestone, as above	110	1,205
Upper Cretaceous: Post-Eutaw (Undifferentiated):		
Marl: dark, bluish-gray to brown, gray and chalky at depth, silty, micaceous, abundantly glauconitic, carbonaceous, pyritiferous, fossiliferous (at certain horizons macroshells, Ostracods, and Foraminifera)	1,255	2,460
Globotruncana sp., *Guembelina striata* at 1213-1228.		
Bolivinoides decorata at 1268-1283.		
Planulina texana common at 1553-1569.		
Kyphopyxa christneri at 1591-1605.		
Vaginulina texana at 2108-2123.		
Eutaw Formation (Restricted):		
Indurated sand: fine to medium-grained, micaceous, glauconitic at depth, phosphatic, fossiliferous (oyster shells)	130	2,590
Tuscaloosa Formation:		
Sand: fine to coarse-grained, subangular, arkosic, micaceous; interbedded clay, pale to dark-yellowish-green, laminated, silty, finely micaceous, somewhat iron-stained	250	2,840

	Thickness (feet)	Depth (feet)
Sand: as above; interbedded shale, dark-gray to black, fissile, silty, carbonaceous, finely micaceous	125	2,965
Shale: as above; interbedded sand, fine-grained, micaceous	120	3,085
Indurated sand: fine to medium-grained, subangular, glauconitic, micaceous	20	3,105
Sand: fine to coarse-grained, subangular, arkosic, micaceous	62	3,167
Sand: as above; interbedded clay, dark-gray to greenish-gray with red to purple streaks (mottled), sandy, micaceous, sideritic	48	3,215
Sideritic nodules common to abundant at 3167-3182.		
Lower Cretaceous(?) (Undifferentiated):		
Sand: coarse-grained, subangular to subrounded, varicolored, cherty, arkosic; interbedded clay, mottled, somewhat waxy in appearance, very micaceous, sandy	161	[1]3,376

Summary:

No samples	615	615
In Paleocene (Clayton formation)	590	1,205
Upper Cretaceous (post-Eutaw, undifferentiated)	1,255	2,460
Upper Cretaceous (Eutaw formation, restricted)	130	2,590
Upper Cretaceous (Tuscaloosa formation)	625	3,215
In Lower Cretaceous (?) (undifferentiated)	161	[1]3,376

Potential Water-Bearing Zones:

Limestone	150	1,095

Remarks:

On the basis of the above log good aquifers are scarce. In this part of Georgia the entire post-Tuscaloosa Cretaceous section has become marine, hence has "silted-up", leaving very few, if any, well developed sands that can be utilized as sources of ground water. Consequently the first good water-bearing sands occur in the more deeply-buried Tuscaloosa formation, beginning at a depth of 2590. Above the Cretaceous the only reliable, relatively shallow-lying aquifers are the Clayton formation (noted above) and the lower Wilcox sands. The latter are not reported in this well log because the samples were not collected until a depth of 615 had been reached.

[1]Not reported below 3,376. Total depth 7,320 feet.