# 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

Stephen M. Herrick, Geologist United States Geological Survey



Prepared cooperatively by the U. S. Geological Survey

ATLANTA 1961

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# LETTER OF TRANSMITTAL

### Department of Mines, Mining and Geology

May 2, 1961

His Excellency, S. Ernest Vandiver Governor of Georgia and Commissioner Ex-Officio State Division of Conservation Atlanta, Georgia

Dear Governor Vandiver:

I have the honor to submit herewith Georgia Geological Survey Bulletin No. 70 "Well logs of the Coastal Plain of Georgia by Dr. Stephen M. Herrick of the Ground Water Branch, Water Resources Division, United States Geological Survey.

This report contains much valuable data about the geology and water-bearing formations of the Coastal Plain of Georgia. The ground-water information will be of tremendous aid to the cities, industries, farmers, and well drillers of the State in their search for water supplies. The geologic information will help those who are engaged in the search for petroleum in Georgia. The report includes a map showing the location of the wells.

I believe that this report will be one of the most valuable contributions in the search for water and oil that we have prepared in cooperation with the Federal Survey.

Very respectfully yours,

Garland Peyton, Director

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# **ILLUSTRATIONS**

Figure 1. Well location map, Coastal Plain of Georgia ...... In Pocket

# WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

By

Stephen M. Herrick

#### Introduction

Nearly all cities and all rural dwellers of the Coastal Plain of Georgia obtain their water supply from wells. This section of Georgia has some of the most extensive and productive aquifers in the United States. In the years since World War II, the development of the ground-water resources has more than doubled in some parts of the Coastal Plain, and it is considered as the key to future economic development of other parts as well.

The study of the lithologic characteristics and stratigraphic extent of the surface and subsurface formations of an area is an important adjunct to our knowledge of the occurrence and availability of ground water. One purpose of this study, therefore, was to correlate subsurface information in order to know the lithologic characteristics and stratigraphic extent of the water-bearing formations of the Coastal Plain. It is hoped that this information will prove helpful in the planning of future geologic and ground-water studies.

Another purpose of this study was to make available to the well drillers and the public information concerning the depth, thickness, and lithology of the water-bearing formations. Where quality-of-water problems exist, an attempt has been made to note this fact in the log, thereby pointing to the need for additional ground-water investigations.

This report includes well logs representative of all the Coastal Plain counties. The information may be used as a guide to those individuals or communities planning to develop the ground-water resources of their county, to tell them the type of material to be drilled through, the probable water-bearing zones, and the probable depth of a completed well.

This report contains a total of 354 well logs. The basis for these logs is well cuttings, or well samples, which have been collected by the Geological Survey during the period 1938 to 1960. Prior to 1938, samples of "wildcat" oil tests were collected by the Georgia Geological Survey and the descriptions of some of them are included.

The logs are the result of studies carried on by the author intermittently for approximately 13 years and full time since 1956. A few important logs, particularly those of certain oil tests, have necessarily been omitted from this report. Others have been published and may be consulted in the literature, and hence do not require repetition here.

This report serves to bring up to date certain information about the geology of the Coastal Plain in Georgia. Many stratigraphic problems still exist. This report will serve as a basis for future, more detailed, investigations dealing with some of these problems.

#### Acknowledgments

The report was prepared as a part of the ground-water investigations of Georgia being made by the U.S. Geological Survey in cooperation with the Georgia Department of Mines, Mining, and Geology, Garland Peyton, Director. Ground-water investigations of the Geological Survey are made under the general supervision of P. E. LaMoreaux, Chief, Ground Water Branch. Acknowledgment is made of the willing cooperation of many well drillers who furnished the well cuttings for the logs. Electric logs were an important aid to this study. Many electric logs were furnished by Captain Peyton from the files of his Department. Others were made by personnel of the Ground Water Branch.

#### Treatment of Well Samples

The wells described herein were selected partly on the basis of geographic location so that at least one well log would be available for every county, and partly with regard to the completeness of well samples and extent of the geologic section penetrated. All samples were examined under the binocular microscope. The gross lithology is described and some of the microfossils, chiefly Foraminifera, are listed. Preparation of the individual samples prior to examination followed the standard procedure well known to micropaleontologists the world over.

The Foraminifera represent the paleontologic control utilized in this study. The author made all the identifications shown. Of the individual species observed, only a relatively small number are included in the logs. However those listed represent the principal diagnostic guide fossils and first observed occurrences. Individual species representative of the formations penetrated during drilling were identified from comparative surface (outcrop) material wherever possible, otherwise from published descriptions and figures bearing on the subject. In many instances the specific identity of various diagnostic foraminiferal species, chiefly the "larger" Foraminifera, was not known. In such cases the specific name was omitted and only the generic name utilized, such as *Lepidocyclina* sp., *Asterocyclina* sp., *Operculinoides* sp. Moreover, complete scientific terminology for the individual species was not considered necessary for purposes of this report, and the nomenclature does not necessarily conform with present usage throughout.

Representative specimens of the foraminiferal species included in this report are deposited at the U.S. National Museum, Washington, D. C.

#### Correlation

Formational names used in this report are those accepted by the U.S. Geological Survey as applicable to the southeastern Gulf Coast. In the use of the terms Flint River and Suwannee, however, it is believed that more work is needed before the true stratigraphic positions of these formations in Georgia is fully understood. To avoid difficulties these units are referred to as Oligocene undifferentiated. In general, the same can be said of certain other nomenclatural problems of the Tertiary strata of the Coastal Plain of Georgia, such as Pleistocene to Recent, Pliocene to Recent, Miocene, and lower Eocene. In this report the heading Gosport sand is not generally employed. Although the Gosport sand is a definite mappable unit in parts of the Coastal Plain, particularly in Houston County, it cannot always be differentiated from cuttings in the subsurface. For this reason it was thought best usually to include it as part of the Lisbon formation or Claiborne group, undifferentiated, as the case may be.

The strata of Cretaceous age in the southeast have been described in reports by other investigators, including W. Storrs Cole, Paul and Esther Applin, and others. In instances where Cretaceous strata were penetrated, the logs either were discontinued short of total depth or that part of the section summarized into generalized divisions such as post-Tuscaloosa, Tuscaloosa formation, and in rare instances Lower Cretaceous (?). In the logs of such wells, the first observed occurrences of key fossils in the post-Tuscaloosa part of the sections are listed in order to help other workers attempting to reconstruct the geologic history of the Coastal Plain. In wells penetrating rocks of pre-Cretaceous age no attempt is made to describe them in any detail. In most instances such rocks are designated crystalline rocks, or basement complex undifferentiated. In others the logs are discontinued short of the basement complex. The strata of Tertiary age are the most important sources of ground water in the Coastal Plain as a whole, and the geologically older beds of Cretaceous age are important as water-bearing formations only along the upper limits of the Coastal Plain, immediately downdip from the Fall Line. Greater emphasis was therefore placed on the rocks of Tertiary age.

In the lithologic descriptions of the well cuttings, the dominant type of sediment is mentioned first, followed by the other types according to the degree of representation in the samples.

Elevations employed in this report refer to mean sea level. Many elevations were obtained by means of an aneroid barometer and hence are subject to a possible error of several feet. Other elevations represent average figures, taken from highway maps issued by the Georgia Highway Department. For reconstructing subsurface conditions by means of cross sections, where only relative elevations are needed, it is felt that elevations of this order of accuracy are adequate. As time goes by and new topographic maps appear, these elevations will gradually be replaced by more accurate figures.

The well logs are listed alphabetically by counties. Each log has the designation GGS (Georgia Geological Survey) followed by the number assigned to the well, as GGS 436. No attempt was made to list part of a section represented by a missing interval (missing samples). Where the missing interval occurs at the top of a formation, the designation In as "In middle Eocene" was used. The word In also precedes those units, the top of which could not be determined from study of the samples even though all the samples were available.

The descriptive part of each log is followed by a summary of the stratigraphy and a listing of the potential water-bearing zones penetrated in the well.

The locations of wells included in this report are shown on the map (fig. 1.) where they are designated by their numbers, the letters GGS being omitted. The symbols differentiate between an oil test and a water well and between definite and indefinite locations. Each well shown as indefinite in location cannot be plotted in its true geographic location because it is not known, but each has been located as closely as possible in the locality indicated.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

Location: 650 ft. west of Southern Depot and 110 ft. north of Southern R.R. in city of Baxley Owner: No. 3 City of Baxley	Well	LING COUNTY 1 No.: GGS 50 v.: 204		
Driller: Gray Well and Pump Corporation Drilled: February 1942	Т	hickness (feet)	Depth (feet)	
No samples		40	40	
In Pliocene to Recent (Undifferentiated):				
Sand: fine to medium-grained; some very sandy clay, p green or mottled		55	95	
Miocene (Undifferentiated):				
Clay: pale-green, sandy, phosphatic at depth; interbea sand and limestone		393	488	
Sand, fine to medium-grained with many black phosph pebbles at 225-275.	natic			
Sand, fine to coarse-grained, abundant black phosph pebbles at 415-430.	natic			
Sand as above; and many fragments of limestone, gra white, dense (calcitized) at 430.	y to			
Sand, fine to coarse-grained, with abundant black p phatic pebbles at 465-475.	hos-			
Limestone: gray to white, sandy, phosphatic, fossilifer dolomitized at depth	-	27	515	
Oligocene (Undifferentiated):				
Limestone: gray, dense (much calcitized) nodular, fossil ous (Foraminifera)		75	590	
Rotalia byramensis var., Asterigerina sp., $Pyrgo$ sp. at 525.	515-			
No samples		20	610	
In Upper Eocene: Jackson Group: Ocala Limestone:				
Limestone: reddish-brown, extremely dense and crysta (highly calcitized), fossiliferous (many Foraminifera)		20	630	
Gypsina globula, Operculinoides sp., Asterocyclina nassauensis at 610-620.				
Operculina mariannensis at 620-630.				

	Thickness (feet)	Depth (feet)
Limestone: light-gray, extremely dense and crystalline (high- ly calcitized), fossiliferous (as above)	90	720
Pseudophragmina sp., Lepidocyclina sp. at 700-710.		
Limestone: white, soft and chalky in streaks; otherwise con- siderably calcitized and crystalline, fossiliferous (as above)	100	820
Heterostegina ocalana at 760-770. Amphistegina pinarensis var. at 770-780.		
Limestone: light-gray, extremely dense and crystalline, as interval 630-720		840
Summary:		
No samples	40	40
In Pliocene to Recent (undifferentiated)		95
Miocene (undifferentiated)		515
Oligocene (undifferentiated)		590
No samples		610
In upper Eocene (Ocala limestone)	230	840
Potential Water-Bearing Zones:		
Limestone	325	840
ADE	LING CO	UNTV
AII	LING CO	UNII
ner of Land Lot 522, 2nd Land District Ele Owner: No. 1 W. E. Bradley Driller: Felsenthal and Weatherford	ll No.: GG v.: 229	S 148
Drilled: July 1947	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Sand: fine to medium-grained, angular	10	10
No samples		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.		

WELL	Logs	OF	THE	COASTAL	Plain	0F	GEORGIA	7

	Thickness (feet)	Depth (fe <b>e</b> t)
Oligocene (Undifferentiated):		
Limestone: light-gray, much calcitized, massive, nodular, fos- siliferous (some megafossils, echinoid and bryozoan re- mains, and Foraminifera)	120	640
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 Fora- minifera)	120	760
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, mas- sive, fossiliferous (Foraminifera at certain levels)	160	920
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 dissemi- nated), fossiliferous (macroshells and bryozoan remains at certain horizons); sand, fine to medium-grained, angu- lar, somewhat phosphatic		1,350
Cibicides westi at 1260-1270. Operculinoides sp. at 1300-1310.		
Sand: fine to coarse-grained, angular; marl, gray, somewhat carbonaceous, micaceous, glauconitic		1,430
Limestone: white, dense, much calcitized, coarsely glauconitic, fossiliferous; dolomitic limestone, dark-brown, saccharoidal, glauconitic		1,530
Macroshells common to abundant at 1450-1530.		

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

	Thickness (feet)	Depth (feet)
Tallahatta Formation:		
Sand: fine to coarse-grained, angular, abundantly glauco- nitic; relatively thin stringers of marl, dark-gray, silty, glauconitic, fossiliferous (Foraminifera at certain horizons)	160	1,690
Cibicides tallahattensis at 1570-1580.		
Valvulineria jacksonensis var. at 1600-1610.		
Lower Eocene and Paleocene (Undifferentiated):		
Marl: gray, silty, carbonaceous, micaceous, glauconitic, fos- siliferous (Foraminifera)	70	1,760
Eponides dorfi, Globorotalia wilcoxensis 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
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Sand: fine to medium-grained, angular; interbedded marl, gray, silty, glauconitic, micaceous, pyritiferous, fossilifer- ous (macroshells, Ostracods, and Foraminifera at certain levels)	215	2,310
Anomalina pseudopapillosa at 2155-2170.		
Globotruncana sp., Gaudryina sp. at 2275-2290.		
Dorothia sp., Guembelina striata 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
Cibicides harperi at 2480-2490.		
Planulina taylorensis at 2580-2590.		
Sand: fine to medium-grained, angular, phosphatic; inter- bedded marl, as above	150	2,900
Marl: brown, fissile, silty, carbonaceous, micaceous, pyriti- ferous, fossiliferous (Foraminifera)	50	2,950

Well	LOGS	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA	

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	Thickness (feet)	Depth (feet)
Inoceramus prisms common, Kyphopyxa christneri 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
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, glauconitic, fossilifer- ous (macroshells)		3,120
Sand: dark-gray to black, fissile, carbonaceous (finely dis- seminated); 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 <b>,9</b> 60
Siderite nodules abundant at 3480-3490.		
Lower Cretaceous (?) (Undifferentiated):		
Clay: pale-green to brick-red, waxy, highly micaceous, sandy; interbedded sand, coarse-grained, angular, arkosic	115	4,075
Basement Complex (Undifferentiated):		
Crystalline rock, undifferentiated		4,098
Summary:		
Miocene (undifferentiated)	520	520
Oligocene (undifferentiated)		640
Upper Eocene (Ocala limestone)		920
In middle Eocene (Lisbon formation)		1,530
In middle Eocene (Tallahatta formation)		1,690
Lower Eocene and Paleocene (undifferentiated)		2,095
Upper Cretaceous (post-Tuscaloosa undifferentiated)		3,050
Upper Cretaceous (Tuscaloosa formation)		3,960
Lower Cretaceous(?) (undifferentiated)		4,075
Basement complex (undifferentiated)	23	4 098

# Potential Water-Bearing Zones:

Basement complex (undifferentiated) 23

Limestone	320	860
Dimescone	340	000
Sand: fine to coarse-grained	50	1.430
cand. The to coarse-granned	90	1,430

9

4,098

APPLING COUNTY

Location: About 2 mi. east of Graham, Land Lot 108, 3rd Land District Owner: No. 1 Baptist Home	Well No.: GGS 16 Elev.: 199	
Driller: W. B. Graham		
Drilled: 1947	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, arkosic at depth		90
Miocene (Undifferentiated):		
Clay: light-gray to pale-green, very sandy, phosphatic depth; interbedded sandy limestone and beds of sand		550
Gray to brown phosphatic pebbles at 230-240.		
Sand, indurated, phosphatic, at 390-420.		
Dolomitic limestone, light-brown, sandy, phosphatic, 420-450.	at	
Sand, fine to coarse-grained, phosphatic at 450-550.		
Oligocene (Undifferentiated):		
Limestone: cream to light-gray, soft and dense (calcitize nodular, fossiliferous (Foraminifera)		630
Rotalia byramensis at 550-560. Dictyoconus <sup>1</sup> sp. at 570-580.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, dense (much calcitized), fossilifer (bryozoan remains and Foraminifera)		640
Operculinoides floridensis at 630-640.		
Summary:		
Pliocene to Recent (undifferentiated)		90
Miocene (undifferentiated)		550
Oligocene (undifferentiated)		630
Upper Eocene (Ocala limestone)		640
Potential Water-Bearing Zones:		

Sand: fine to coarse-grained	10	60
Sand: fine to coarse-grained, phosphatic	100	550
Limestone	90	640

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

# ATKINSON COUNTY

Location: 1,650 ft. north and 660 ft. east of southwest	Well No.: GGS 107
corner of Land Lot 71, 7th Land District	Elev.: 222
Owner: No. 1 Doster Ladson	(derrick floor)
Driller: Sun Oil Company	
Drilled: January 1945	

	Thickness (feet)	Depth (feet)
No samples		90
In Miocene (Undifferentiated):		
Sand: fine to coarse-grained, subangular, phosphatic	10	100
Sand: as above; and clay, pale-green, somewhat indurated and tough, sandy	70	170
Limestone: cream to light-brown, dense, somewhat saccha- roidal, much calcitized, sandy, fossiliferous (molluscan shells); interbedded with sand and clay, as above	90	260
Oligocene (Undifferentiated):		
Limestone: cream, nodular, rather massive, cherty, sandy, fossiliferous (some Foraminifera)		390
Quinqueloculina sp., Rotalia mexicana var.,		
Asterigerina subacuta at 260-270.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, calcitized, fossiliferous (molluscan shells, echinoids, bryozoan remains and Foraminifera)		580
Camerina sp. at 400-410.		
Camerina sp., Lepidocyclina sp. at 440-450.		
Gypsina globula common at 460-470.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Dolomitic limestone: brown, rather massive, saccharoidal, sandy; some limestone, as above		600
Sand: medium to coarse-grained, subangular; dolomitic lime-		

	Thickness (feet)	Depth (feet)
Limestone: cream, calcitized, somewhat nodular and loosely consolidated, granular, chalky, cherty at certain levels, fos- siliferous (Foraminifera); interbedded limestone, similar to above but partially dolomitized, light-brown, saccharoidal.	690	1,290
Lepidocyclina sp. at 700-710.		
Discorinopsis gunteri at 810-820.		
Asterocyclina monticellensis at 930-940.		
Asterocyclina monticellensis, Lepidocyclina antillea at 1030- 1040.		
Discorbis inornatus at 1060-1070.		
Tallahatta Formation:		
Dolomitic limestone: brown, saccharoidal, somewhat cherty, gypsiferous, glauconitic at depth; interbedded with lime- stone, cream, calcitized, granular, sparsely glauconitic, fos- siliferous (Foraminifera)	190	1,480
Operculinoides sp., Asterocyclina sp. at 1330-1340.		
Lepidocyclina antillea common at 1350-1360.		
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: white to cream, much calcitized, dense, massive, coarsely glauconitic, sandier at depth, fossiliferous at cer- tain levels (molluscan shells and Foraminifera)	170	1,650
Paleocene: Midway Group: Clayton Formation:		
Indurated sand <sup>1</sup> : fine-grained, micaceous, finely phosphatic, fossiliferous (fragments and molds of molluscan shells)		1,700
Limestone: gray to cream, much calcitized, dense, coarsely glauconitic, sandy, fossiliferous (fragments and molds of molluscan shells and some Foraminifera)	130	1,830
Robulus midwayensis? at 1720-1730.		
Robulus midwayensis at 1740-1750.		
Upper Cretaceous: Providence and Ripley (Undifferentiated):		
Clay (or marl?): dark-brownish to bluish-gray, silty, mica- ceous, sparsely glauconitic, pyritiferous, fossiliferous at certain levels (Foraminifera); interbedded with thin ton- gues of sand, fine-grained, micaceous, pyritiferous	580	2,410
Barre of sama, two Brannon, micacoous, Pyrinterous	000	-,

<sup>&</sup>lt;sup>1</sup>This sand contains Operculinoides catenula and Pseudophragmina stephensoni in wells situated farther west, hence is tentatively placed in the Paleocene.

### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Anomalina pseudopapillosa? at 1870-1880.		
Robulus navarroensis at 1890-1900.		
Robulus navarroensis, Globotruncana sp., Anomalina pseu- dopapillosa at 1940-1950.		
Cibicides harperi at 2030-2040. Clavulinoides trilatera, Globotruncana sp. at 2070-2080.		
Palmula reticulata at 2310-2320.		
Spiroplectammina semicomplanata at 2390-2400.		
Cusseta and Blufftown Formations (Undifferentiated):		
Marl: as above but more abundantly fossiliferous	380	2,790
Bolivinoides decorata at 2410-2420.		
Planulina texana at 2610-2620.		
Blufftown Formation:		
Marl: as above but coarsely glauconitic	465	3,255
Glauconite prominent at 2790-2800.		
Vaginulina texana at 3050.		
Inoceramus prisms common to abundant at 2950-2960.		
Eutaw Formation (Restricted):		
Indurated sand: fine to medium-grained, subangular, mica- ceous, phosphatic, glauconitic, fossiliferous at certain levels (fish teeth and molluscan shells); interbedded with thin stringers of clay, dark-brownish-green, laminated, silty, micaceous	132	3,387
Tuscaloosa Formation:		
Sand: fine to coarse-grained, subangular, abundantly mica- ceous, glauconitic at certain horizons, pyritiferous, arkosic; interbedded with relatively thin stringers of clay, dark- brown to brownish-green, somewhat laminated, silty, finely micaceous; a few thin beds of lignite	291	3,678
Shale (or thinly laminated clay): dark-brown, laminated, silty, micaceous, lignitic, fossiliferous at certain levels (im- pressions and fragments of molluscan shells); interbedded with scattered tongues of indurated sand, fine to medium- grained, subangular, micaceous, glauconitic, fossiliferous	100	0.010
at various levels (oyster shells)	132	3,810

13

.

	Thickness (feet)	Depth (feet)
Sand: coarse-grained, subangular, abundantly micaceous, arkosic, pyritiferous; interbedded with beds of clay, dark- brownish-green with red to purple streaks (mottled), silty, micaceous, sideritic at certain horizons	130	3,940
Sand, soower mained subsympton to subsympton and manipuland		
Sand: coarse-grained, subangular to subrounded, varicolored, coarsely micaceous, arkosic; interbedded with many rela- tively thin stringers of clay, brick-red, silty, micaceous	280	4,22(
Basement Complex:		
Volcanic tuff <sup>1</sup>		4,296
Summary:		
No samples		90
Miocene (undifferentiated)	170	260
Oligocene (undifferentiated)	130	390
Upper Eocene (Ocala limestone)		580
Middle Eocene (Lisbon formation)		1,290
Middle Eocene (Tallahatta formation)	190	1,480
Lower Eocene (Wilcox Group, undifferentiated)	170	1,650
Paleocene (Clayton limestone)	180	1,830
Upper Cretaceous (Providence and Ripley, undifferentiated)		2,410
Upper Cretaceous (Cusseta and Blufftown, undifferentiated)		2,790
		2,100
Upper Cretaceous (Blufftown formation)		3,255
Upper Cretaceous (Eutaw, restricted)	465 132	,
Upper Cretaceous (Eutaw, restricted) Upper Cretaceous (Tuscaloosa formation)	465 132 553	3,255
Upper Cretaceous (Eutaw, restricted)	465 132 553 280	3,255 3,387

# ATKINSON COUNTY

		No: GGS 205 <sup>2</sup>	425
		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Clay: red, sandy, limonitic Sand: fine to coarse-grained, limonitic, with inclusions kaolin (clay; white, somewhat sandy), and some clay	of	10	10
above		30	40
Clay: tan to dark-brown, sandy		10	50
IDenset 1.1. Dent T. Annie 1071 ITG. Good Group Of a Dillio Di			

<sup>1</sup>Reported by Paul L. Applin, 1951, U.S. Geol. Survey Circ. 91, p. 21. <sup>2</sup>Average elevation taken from State Highway map.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

Miocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: pale-green, sandy, phosphatic at depth; interbedded sand	90	140
Gray phosphatic pebbles, at 60-70. Fine-grained sand, at 70-90. Fine-grained sand, at 110-140.		
Clay: pale-green, sandy, phosphatic; interbedded with thin beds of limestone, white, sandy; some sand as above		190
Limestone: white, sandy, phosphatic, dolomitized at depth, fossiliferous (macroshells)	90	280
Dolomitic limestone, light-brown, saccharoidal, phosphatic, at 220-280.		
Clay: pale-green, sandy, with some dolomitic limestone and sand as above	10	290
Oligocene (Undifferentiated):		
Clay: with fragments of limestone, nodular, recrystallized, calcitized, more fossiliferous with depth	110	400
Quinqueloculina sp. at 290-300. Quinqueloculina cf. Q. leonensis, Dictyoconus <sup>1</sup> sp. at 300- 310.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: dense, much calcitized, fossiliferous (macroshells, bryozoan remains, and Foraminifera)	20	420
Operculinoides cf. O. ocalanus at 400-410. Asterocyclina nassauensis at 410-420.		
Limestone: softer, less calcitized than above	40	460
Gypsina globula at 420-430. Operculinoides sp. abundant at 440-450. Pseudophragmina flintensis at 450-460.		
Summary:		
Pliocene to Recent (undifferentiated)		50
Miocene (undifferentiated)		290
Oligocene (undifferentiated)		400
Upper Eocene (Ocala limestone)	60	460
Potential Water-Bearing Zones:		
Limestone	160	460

"Reworked(?) fossil of middle Eocene age.

### **BACON COUNTY**

	BACON COU	NTY
Location: City of Alma Owner: No. 1 City of Alma	Well No.: GG Elev.: 200	S 58
Driller: Gray Well & Pump Company		
Drilled: May 1938		
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: red, some gray (mottled), very sandy, limonitic		50
No samples		64
In Miocene (Undifferentiated):		
Clay: pale-green, sandy, phosphatic at depth; interbed sand and sandy limestone		360
Brown chert abundant at 200-210.		
Brown phosphatic pebbles at 210-220.		
Fossiliferous limestone of macroshells at 260-270.		
Limestone: white, sandy, fossiliferous and dolomitic at de	pth 90	450
Dolomitic limestone, brown, saccharoidal, at 400-450.		
Oligocene (Undifferentiated):		
Limestone: cream, fossiliferous		500
Rotalia by ramensis, $Dicty o conus^1$ sp. at 450-460.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, fossiliferous		626
Operculinoides floridensis at 500-510.		
Bryozoan remains abundant at 520-530.		
Gypsina globula at 540-550.		
Summary:		
Pliocene to Recent (undifferentiated)		50
No samples		64
In Miocene (undifferentiated)		450
Oligocene (undifferentiated)		500
Upper Eocene (Ocala limestone)	126	626
Potential Water-Bearing Zones:		
Limestone		626

Limestone \_\_\_\_\_ 126

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

.

BAKER COUNTY

	1		
Owner: No. 1 West Baker Elementary School Drilled: 1956	We	11 No.: GG	S 479
		Thickness (feet)	Depth (feet)
Residuum :			
Sand: fine to coarse-grained, angular; fragments of resid limestone			10
Clay: gray, tan and red, sandy, limonitic, carbonace fragments of residual limestone		70	80
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: dense, much calcitized, sandy, coarsely gla nitic, and fossiliferous at depth; some clay as above		114	194
Limestone with macrofossils at 95-194.			
Summary:			
Residuum		80	80
Upper Eocene (Ocala limestone)		114	194
Potential Water-Bearing Zones:			
Limestone		114	194
I	BEN	HILL CO	UNTY
• •		No.: GGS : 357	154
		Thickness (feet)	Depth (feet)
Miocene: Hawthorn Formation:			
Sand: fine to coarse-grained; some clay, light-gray to (mottled), sandy		74	74
Clay: pale-green, sandy; some sand as above			210
Tampa Limestone:			
Limestone: white, sandy, fossiliferous (macroshells and p Foraminifera); some clay, light-gray, calcareous		46	256
<i>Sorites</i> sp. at 240-256.			

Oligocene (Undifferentiated):	Thickness (feet)	Deptl (feet)
Ongocene (Undifferentiated):		
Limestone: white to light-gray, extremely dense and crystal- line, cherty, sandy, fossiliferous (some echinoid and bryo- zoan remains and Foraminifera)	94	350
Rotalia mexicana var. at 256-263.		
Gypsina globula <sup>1</sup> at 263-275.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, relatively soft, somewhat calcitized and granular, fossiliferous (echinoid and bryozoan remains and Foraminifera)	280	630
Operculinoides floridensis at 350-360.		
Camerina striatoreticulata at 600-615.		
Limestone: as above, interbedded with dolomitic(?) lime- stone, light-brown, saccharoidal	95	725
Amphistegina pinarensis var. at 630-645.		
Middle Eocene(?): Claiborne Group (Undifferentiated):		
Limestone: cream, nodular, much calcitized, very sandy, fos- siliferous (some bryozoan remains and Foraminifera)	14	739
Lepidocyclina sp. at 725-739.		
Summary:		
Miocene (Hawthorn formation)		210
Miocene (Tampa limestone)		256
Oligocene (undifferentiated)		350
Upper Eocene (Ocala limestone)		725
Middle Eocene (?) (Claiborne group, undifferentiated)		739
Potential Water-Bearing Zones:		
Limestone	280	630

I	limestone	 280	630

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

# BEN HILL COUNTY

Поста	No.: GGS : 370 <sup>1</sup>	160
	Thickness (feet)	$\begin{array}{c} \mathbf{Depth} \\ (\mathbf{feet}) \end{array}$
Miocene: Hawthorn Formation:		
Clay: light-gray to pale-green, sandy; and sand, fine to coarse-grained	190	190
Tampa Limestone:		
Limestone: white, sandy, interbedded with thin stringers of sand and an occasional clay bed	70	260
Clay, light-gray, calcareous, at 230-340.		
Oligocene (Undifferentiated):		
Limestone: cream to white, rather dense, nodular, fossilifer- ous (some Foraminifera)	100	360
Rotalia byramensis at 260-270. Dictyoconus <sup>2</sup> sp. at 340-350.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone, as above	20	380
Operculinoides floridensis, Lepidocyclina sp. at 360-370.		
Summary:		
Miocene (Hawthorn formation)		190
Miocene (Tampa limestone)		260
Oligocene (undifferentiated) Upper Eocene (Ocala limestone)		$360 \\ 380$
Opper Locene (Ocala limestone)	20	380
Potential Water-Bearing Zones:		
Limestone	90	380

<sup>&#</sup>x27;Elevation taken from State Highway map. Reworked(?) fossil of middle Eocene age.

## BEN HILL COUNTY

Location: West side of Gordon Street in Fitzgerald Owner: City of Fitzgerald Well No. 4 Driller: Layne-Atlantic Company Drilled: August 1953	Well No.: GGS Elev.: 357	355
	Thickness (feet)	Depth (feet)
Miocene: Hawthorn Formation:		
Clay: mottled to pale yellowish-green at depth, sandy; bedded sand, fine to coarse-grained, subangular, phosp		179
Tampa Limestone:		
Limestone: white, sandy, fossiliferous (macroshells at d	epth) 64	243
Oligocene (Undifferentiated):		
Limestone: cream, massive, dense, saccharoidal, some nodular, cherty, fossiliferous (bryozoan remains, Ostr and Foraminifera)	acods,	295
Rotalia mexicana var., Nonion advena, Cibicides sp. a 254.	t 243-	
Rotalia mexicana var., Asterigerina subacuta at 261-2	69.	
Summary:		

#### Summary:

Miocene (Hawthorn formation)	179	179
Miocene (Tampa limestone)	<b>64</b>	<b>243</b>
Oligocene (undifferentiated)	52	295

### **Potential Water-Bearing Zones:**

Limestone 295

### Remarks:

1. Better water-bearing limestones lie below depth of 295.

2. This well reportedly was drilled to a total depth of 612.

# Well Logs of the Coastal Plain of Georgia

### BERRIEN COUNTY

Location: About halfway between Alapaha and Nash- ville, Land Lot 41, 10th Land District I Owner: No. 1 L. R. King Driller: W. B. Graham Drilled: 1947	Well No.: GGS 159 Elev.: 265 <sup>1</sup>	)
Dimort 1911	Thickness Dept (feet) (feet	
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained; and some clay, light-gr sandy	• ·	30
Miocene: Hawthorn Formation:		
Clay: pale-green, sandy, phosphatic at depth		70
Gray phosphatic pebbles at 100.		
Tampa Limestone:		
Limestone: white, sandy, dolomitized at depth		7
Dolomitic limestone at 220-300.		
Elphidium sp. at 300-317.		
Summary:		
Pliocene to Recent (undifferentiated)		30
Miocene (Hawthorn formation) Miocene (Tampa limestone)		-
		. 1
Potential Water-Bearing Zones:		_
Limestone		17
I	BERRIEN COUNT	Y
	Well No.: GGS 421 Elev.: 240 <sup>1</sup>	
	Thickness Dept (feet) (feet	
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, subangular to subrounded, lin nitic; clay, yellow to tan, sandy		3
Clay: pale-bluish-gray with purple streaks (mottled), san limonitic		4
<sup>1</sup> Average elevation taken from State Highway map.		

	Thickness (feet)	Depth (feet)
Sand: fine to medium-grained, subangular to subrounded, arkosic, sparsely phosphatic		64
Miocene (Undifferentiated):		
Clay: pale-brownish to yellowish-green, blocky, sandy	20	84
Limestone: white, rather dense, saccharoidal, sandy, cherty		182
Oligocene (Undifferentiated):		
Limestone: white, nodular, much calcitized, somewhat sac- charoidal, fossiliferous (Foraminifera)	35	217
Quinqueloculina sp., Rotalia mexicana var. at 182-187.		
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, rather soft, somewhat chalky, fossilifer- ous (bryozoan remains and Foraminifera)	93	310
Gypsina globula at 207-228.		
Operculinoides sp. common at 248-269.		
Limestone: flat-white, much calcitized, somewhat crystalline, fossiliferous (bryozoan remains and Foraminifera)	20	330
Operculinoides sp., Lepidocyclina sp., Asterocyclina sp. at 325-330.		
Summary:		
Pliocene to Recent (undifferentiated)	64	64

indene to recent (unumerentiated)	04	04
Miocene (undifferentiated)	118	182
Oligocene (undifferentiated)	35	217
In upper Eocene (Ocala limestone)	113	330

# **Potential Water-Bearing Zones:**

Limestone :		113	330
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# **Remarks:**

Quality of samples not good. Hence top of upper Eocene (Ocala limestone) not definitely determined.

	BIBB	COUNT	Y
Location: 8 mi. south of Macon, at Avondale Owner: Cochran Flying Field (U. S. Govt.) Well No. 2 Driller: Layne-Atlantic Company Drilled: May 1941	Well Elev.	No.: GG : 358	S 7
Dimen. May to h	г	hickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:			
Sand: fine to coarse-grained, angular; and some clay, da red, very sandy	ırk-	65	65
Clay, dark-red, very sandy at 0-15. Sand, fine to coarse-grained, angular, at 15-65.			
Upper Cretaceous: Tuscaloosa Formation:			
Sand: fine to coarse-grained, angular, arkosic		80	145
Sand as above; interbedded with thin beds of kaolin, w to pink to red, micaceous, sandy		155	300
Sand, fine to coarse-grained at 200-220.			
Kaolin: white to gray to red, sandy, micaceous		142	<b>442</b>
Sand, fine to coarse-grained, at 342-353. Sand, fine to coarse-grained, at 371-375. Sand, coarse-grained, at 434-442.			
Sand: coarse-grained		54	496
Basement Complex (Undifferentiated):			
Crystalline rocks		13	509
Summary:			
Upper Eocene (Barnwell formation)		65	65
Upper Cretaceous (Tuscaloosa formation) Basement complex (undifferentiated)		431	$496 \\ 509$
·······························		10	500

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	<b>45</b>	145
Sand: fine to coarse-grained	20	220
Sand: fine to coarse-grained	11	353
Sand: fine to coarse-grained	4	375
Sand: fine to coarse-grained	6	434
Sand: fine to coarse-grained	48	490

## **BIBB COUNTY**

Location: 8 mi. south of Macon, at Avondale Owner: No. 1 Cochran Flying Field (U. S. Govt.) Driller: Layne-Atlantic Company Drilled: 1941	Well No.: GG Elev.: 380	S 8
	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:		
Sand: dark-red, fine to coarse-grained, argillaceous		30
Upper Cretaceous: Tuscaloosa Formation:		
Kaolin: gray, micaceous		37
Sand: fine to coarse-grained, interbedded with thin bed clay		270
Sand, fine to coarse-grained at 37-74.		
Sand, fine to coarse-grained at 173-270.		
Kaolin: sandy, micaceous		325
Sand: fine to coarse-grained, angular		375
Summary:		
Upper Eocene (Barnwell formation)		30
Upper Cretaceous (Tuscaloosa formation)		375
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		74
Sand: fine to coarse-grained		270
Sand: fine to coarse-grained	50	375
	BIBB COUNT	ſY
Location: Few miles southwest of Macon	Well No.: GG	S 230
Owner: No. 2 Macon Kraft Company Driller: Layne-Atlantic Company Drilled: August 1951	Elev.: 325 <sup>1</sup>	
	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:		
Sand: fine to coarse-grained, and some clay		30
Sand, fine to medium-grained, red, argillaceous, limo at 0-15.		
Sand, fine to coarse-grained at 13-30.		

<sup>1</sup>Average elevation taken from State Highway map.

WELL LOGS OF THE COASTAL PLAIN OF GEORG	NELL	Logs o	F THE	COASTAL	Plain	$\mathbf{0F}$	GEORGI
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	Thickness (feet)	Depth (feet)
Upper Cretaceous: Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, interbedded with beds of kaolin at various levels	240	270
Kaolin, white, sandy, micaceous at 30-45.		
Sand, coarse-grained at 105-165.		
Kaolin, pink, sandy at 165-195.		
Sand, coarse-grained at 195-225.		
Kaolin, mottled, sandy at 225-255.		
Sand, fine to coarse-grained at 255-270.		

#### Summary:

Upper Eocene (Barnwell formation)	30	30
Upper Cretaceous (Tuscaloosa formation)	<b>240</b>	270

#### **Potential Water-Bearing Zones:**

15	60
60	165
30	225
15	270
	30

	BIBB COUNTY
Location: Southwest Macon, about 1.5 mi. east of Highway 11	Well No.: GGS 357 Elev.: 364
Owner: No. 1, Strietmann Biscuit Company Driller: Layne-Atlantic Company Drilled: September 1953	
-	Thickness Depth (feet) (feet)

#### **Upper Eocene: Jackson Group: Barnwell Formation:** Clay: tan to red to purple (mottled), sandy; some sand, fine to coarse grained, arkosic, limonitic 41 41 Sand, fine to coarse-grained, arkosic, limonitic at 29-41. **Upper** Cretaceous: Tuscaloosa Formation: Clay: gray to pink to purple (mottled), sandy, micaceous, interbedded with sand, fine to coarse-grained, angular, arkosic 203 244 \_\_\_\_ Sand: fine to coarse-grained, angular, arkosic 57 301 **Basement Complex (Undifferentiated):** Crystalline rock 2 303

	Thickness (feet)	Dept (feet)
Summary:		
Upper Eocene (Barnwell formation)		41
Upper Cretaceous (Tuscaloosa formation)		301
Basement complex (undifferentiated)	2	303
Potential Water-Bearing Zones:		_
Sand: fine to coarse-grained		92
Sand: fine to coarse-grained		139
Sand: fine to coarse-grained		166
Sand: fine to coarse-grained	23	194
Sand: fine to coarse-grained	5	217

# **BIBB COUNTY**

Location: City of Macon	Well No.: GGS 361
Owner: No. 1, Dixie Dairies	Elev.: 305
Driller: Layne-Atlantic Company	
Drilled: October 1953	
	Thickness Depth (feet) (feet)

## Upper Cretaceous: Tuscaloosa Formation:

Sand: fine to coarse-grained, angular, arkosic; some kaolin, white to pink, micaceous, sandy	26	26	
Sand: fine to coarse-grained, angular, with kaolin inclusions	100	126	
Clay: gray to pink to brick-red, micaceous, sandy	46	172	
Sand: coarse-grained, arkosic	40	212	
Sand: as above; with fragments of clay, pale-green, highly micaceous (probably weathered crystalline rock?)	37	249	
Basement Complex (Undifferentiated):			
Crystalline rock, much weathered	4	253	
Summary:			
Upper Cretaceous (Tuscaloosa formation)		249	
Basement complex (undifferentiated)	4	253	
Potential Water-Bearing Zones:			

Sand: fine to coarse-grained	 100	126
Sand: fine to coarse-grained	 40	212

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

Location: 0.6 mi. north of Railway Depot in Cochran, Well M approximately 0.25 mi. east of Highway 129 in Elev.: Cochran Owner: No. 1, Hill Lumber Company Driller: Layne-Atlantic Company Drilled: February 1946	No.: GGS : 364	106
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated): Clay: pale-green to mottled, sandy, limonitic	79	79
Limestone: gray, extremely dense (silicified), very cherty		96
Summary:		
Miocene (undifferentiated) Oligocene (undifferentiated)		79 96

# Potential Water-Bearing Zones:

None observed to total depth of well; well unsuccessful.

### BLECKLEY COUNTY

Location: Northeastern part of city, 0.5 mi. east of Well Highway 129 in City of Cochran Elev.:	No.: GGS 1 354	195
Owner: City of Cochran Well No. 2		
Driller: Layne-Atlantic Company		
Drilled: December 1949		
	Thickness (feet)	Depth (feet)

### Miocene and Oligocene Residuum:

Clay: mottled to pale-green, sandy; some sand, fine to coarse-		
grained; fragments of residual limestone, much leached,		
cherty, fossiliferous (bryozoan remains and Foraminifera)	95	95
Rotalia buramensis at 0-95.		
notatia ogramensis at 0-55.		

# In Oligocene (Undifferentiated):

Limestone: white, dense (much calcitized), cherty, fossili-		
ferous (some bryozoan remains and impressions of mega-		
fossils)	4	99

	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Cooper Marl:		
Sand: fine to medium-grained, limey, fossiliferous (Fora- minifera)		125
Bulimina jacksonensis, Uvigerina sp. at 99-125.		
Barnwell Formation (Twiggs Clay Member):		
Marl: light-gray, somewhat sandy to "tight," glauconitic, fos- siliferous (Foraminifera)	29	154
Bulimina jacksonensis common at 125-135.		
Limestone: gray, dense (much calcitized), sandy, finely glau- conitic	5	159
Marl: light-gray, glauconitic; some limestone, cream, soft, fossiliferous (abundant bryozoan remains)	30	189
Ocala Limestone (Tivola Tongue):		
Limestone: cream, soft, fossiliferous (consists almost entirely of bryozoan remains)	9	198
Barnwell Formation (Twiggs Clay Member):		
Marl: light-gray, glauconitic; some limestone, cream, soft, fos- siliferous (abundant bryozoan remains)	13	211
Ocala Limestone (Tivola Tongue):		
Limestone: cream, soft, fossiliferous (consists almost entirely of bryozoan remains)	39	250
Lepidocyclina cf. L. ocalana at 211-217.		
Middle Eocene: Claiborne Group: Gosport Sand:		
Sand: fine to medium-grained, angular	10	260
Lisbon Formation:		
Clay: light-gray, sandy, finely glauconitic, fossiliferous (some Foraminifera)	60	320
Cibicides westi at 260-320.		
Lower Eocene(?) and Paleocene(?) (Undifferentiated):		
Sand: coarse-grained; some clay, gray to pink, sandy, lignitic	74	394
Sand: fine to medium-grained		410

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

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# Upper Cretaceous: Tuscaloosa Formation: Thickness (feet) Depth (feet) Clay: white to gray to brick-red, sandy, lignitic, micaceous; some sand, fine to medium-grained 140 550 Sand: fine to coarse-grained; some thin stringers of clay, gray to pink, sandy, micaceous 61 611

#### Summary:

Miocene and Oligocene residuum	95	95
In Oligocene (undifferentiated)	4	99
Upper Eocene (Cooper marl)	<b>26</b>	125
Upper Eocene (Barnwell formation, Twiggs clay member)	64	189
Upper Eocene (Ocala limestone, "Tivola tongue")	9	198
Upper Eocene (Barnwell formation, Twiggs clay member)	13	211
Upper Eocene (Ocala limestone, "Tivola tongue")	39	250
Middle Eocene (Gosport sand)	10	260
Middle Eocene (Lisbon formation)	60	320
Lower Eocene(?) and Paleocene(?) (undifferentiated)	90	410
Upper Cretaceous (Tuscaloosa formation)	201	611

## **Potential Water-Bearing Zones:**

Sand: fine to medium-grained	10	260
Sand: fine to coarse-grained	74	394
Sand: fine to coarse-grained	19	534
Sand: fine to coarse-grained	61	611

## **BLECKLEY COUNTY**

Location: At Cary Well 1 Owner: No. 1 Smith Driller: H., B. Truluck Drilled: 1950	No.: GGS	277
	Thickness (feet)	Depth (feet)
No samples	25	25
In Miocene and Oligocene Residuum:		
Clay: light-gray to pale-green, cherty at depth; interbedded sand, fine to coarse-grained, limonitic, arkosic	110	135
Summary:		
No samples In Miocene and Oligocene residuum	25 110	25 135

		ickness (feet)	Depth (feet)
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		10	135
	BRANTL	EY CO	UNTY
Location: 0.25 mi. southeast of Atlantic Coast Line R.R. crossing in city of Nahunta Owner: City of Nahunta Driller: Gray Well and Pump Corporation	Well No. Elev.: 64		9
Drilled: August 1938			
		ickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine-grained, finely disseminated phosphatic gra	ains	30	30
Clay: dark-gray, silty, micaceous		4	34
Indurated sand: fine to coarse-grained, sparsely phos	phatic	6	40
Sand: fine to coarse-grained, rounded grains, arkosic		10	50
Limestone: light-gray to light-brown, dense (calcitized) lar, sandy, fossiliferous (casts and impressions of	mega-	10	<b>6</b> 0
fossils)		10	60
Sand: fine to coarse-grained, arkosic		8	68
Miocene (Undifferentiated):			
Clay: dark-green, sandy, blocky; interbedded tongues o fine to coarse-grained, phosphatic		358	426
Black phosphatic pebbles abundant at 150-160.			
Dolomitic limestone: light-brown, saccharoidal, phos interbedded beds of sand, fine to coarse-grained, phos		121	547
Dolomitic limestone prominent at 426-434.			
Oligocene (Undifferentiated):			
Limestone: gray, dense (much calcitized), nodular, ferous (bryozoan remains and Foraminifera)		101	648
$Dictyoconus^1$ sp. at 600-625.			

Dictyoconus<sup>1</sup> sp. at 600-625.

Reworked(?) fossil of middle Eocene age.

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Summary:		
pliocene to Recent (undifferentiated)		68
Miocene (undifferentiated)	479	547
Oligocene (undifferentiated)	101	648
Potential Water-Bearing Zones:		
timestone and sand	113	547

Limestone	and sand	119	041
Limestone		101	648

#### **Remarks:**

Samples of poor quality below 68.

#### **BRANTLEY COUNTY**

Location: 1.4 mi. north of Atlantic Coast Line R.R. at	Well No.: GGS 90
Waynesville, and 0.1 mi. east of county road from	Elev.: 60
Waynesville to Browntown	
Owner: No. 1 CCC Camp (U. S. Govt.)	

- Driller: Gray Well & Pump Corporation
- Drilled: August 1940 Thickness Depth (feet) (feet) No samples 62 62 In Pliocene to Recent (Undifferentiated): Limestone: light-gray, dense (much calcitized), very sandy, sparsely phosphatic, fossiliferous (casts and impressions of megafossils) ------13 75 Sand: fine-grained, finely disseminated phosphatic grains 10 85 100 Clay: gray, sandy, sparse finely disseminated phosphatic grains 15 Indurated sand: fine to medium-grained, somewhat argillaceous 25125 25150 No samples In Miocene (Undifferentiated):

# Clay: dark-green, blocky, sandy, phosphatic, cherty, (at certain levels); interbedded tongues of sand, fine to coarsegrained, phosphatic; stringers of dolomitic limestone; lightbrown, saccharoidal, sandy, phosphatic \_\_\_\_\_ 214 364

Dolomitic limestone prominent at 260-280.

Sand prominent at 304-364.

	Thickness (feet)	Depth (feet)
Summary:		
No samples	62	62
In Pliocene to Recent (undifferentiated)		125
No samples		150
In Miocene (undifferentiated)		364
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		186
Sand: fine to coarse-grained		364
Remarks:		
This well was reportedly drilled to a total depth of 705, he the underlying "principal limestone aquifer."	nce doubtless 1	utilizes
Location: 9 mi. west of Quitman	BROOKS CO Well No.: GG	
Location: 9 mi. west of Quitman Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company Drilled: March 1943		
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company	Well No.: GG	
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company	Well No.: GG Elev.: 130 Thickness (feet)	S 3 Depth
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company Drilled: March 1943	Well No.: GG Elev.: 130 Thickness (feet)	Depth (feet)
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company Drilled: March 1943 No samples	Well No.: GG Elev.: 130 Thickness (feet)	Depth (feet)
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company Drilled: March 1943 No samples In Miocene (Undifferentiated):	Well No.: GG Elev.: 130 Thickness (feet)	Depth (feet) 10
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company Drilled: March 1943 No samples In Miocene (Undifferentiated): Clay: mottled, very sandy	Well No.: GG Elev.: 130 Thickness (feet) 	Depth (feet) 10
Owner: No. 1 M. G. Lawson Driller: Winter Hardware Company Drilled: March 1943 No samples In Miocene (Undifferentiated): Clay: mottled, very sandy Oligocene (Undifferentiated):	Well No.: GG Elev.: 130 Thickness (feet) 	Depth (feet) 10 60

## Summary:

No samples	10	10
In Miocene (undifferentiated)	50	60
Oligocene (undifferentiated)	140	200

# Potential Water-Bearing Zones:

Limestone 140 200

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

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

7

Location: 10 mi. southwest of Quitman Owner: No. 1 H. R. Garrett Driller: W. C. Littleton		DOKS COUNTY ll No.: GGS 21 v.: 117	
Drilled: 1946	Thickness (feet)	Depth (feet)	
Pliocene to Recent (Undifferentiated):			
Sand: fine to medium-grained, with inclusions of kaolin; a clay, mottled to pale-green, sandy	also 	85	
Miocene (Undifferentiated):			
Clay: pale-green, sandy, phosphatic; interbedded at de with limestone, white, sandy		175	
Gray, polished, phosphatic pebbles at 85-100.			
Oligocene (Undifferentiated):			
Limestone: gray, dense (calcitized), nodular, fossiliferous		310	
Quinqueloculina sp. at 175-185.			
Rotalia byramensis var. at 185-190. Dictyoconus <sup>1</sup> sp. at 200-210.			
Dolomitic limestone, brown, saccharoidal, at 308-310.			
Summary:			
Pliocene to Recent (undifferentiated)		85	
Miocene (undifferentiated)		175	
Oligocene (undifferentiated)	135	310	
Potential Water-Bearing Zones:			
Limestone	135	310	
	BROOKS CO	UNTY	
Location: Quitman	Well No.: GG	S 77	
Owner: No. 1 Southside Consolidated School	Elev.: 180 <sup>2</sup>		
Driller: Winter Hardware Company Drilled: January 1942			
	Thickness (feet)	Depth (feet)	
No samples	10	10	
In Pliocene to Recent (Undifferentiated):			

<sup>1</sup>Reworked(?) fossil of middle Eocene age. <sup>2</sup>Average elevation taken from State Highway map.

Clay: pale-green to tan, sandy

30

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: pale-green, sandy, phosphatic	80	120
White, phosphatic pebbles at 40-120.		
Oligocene (Undifferentiated):		
Limestone: gray, dense (calcitized), nodular, fossiliferous	40	160
Quinqueloculina sp. at 120-140. $Dictyoconus^1$ sp. at 140-160.		

## Summary:

No samples	10	10
In Pliocene to Recent (undifferentiated)	30	40
Miocene (undifferentiated)	80	120
Oligocene (undifferentiated)	40	160

# Potential Water-Bearing Zones:

Limestone 4	0 1	60
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BR		UNTY
Location: Barney Wei Owner: No. 1 A. J. Folsom Driller: Winter Hardware Company		S 87
Drilled: August 1942	Thickness (feet)	Depth (feet)
No samples	10	10
In Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained; inclusions of kaolin, white, sandy; some clay, light-gray	90	<b>10</b> 0
In Miocene (Undifferentiated):		
Clay: dark-brown to pale-green; limestone, white, sandy; dolomitic limestone, brown, saccharoidal	120	220
Summary:		
No samples	10	10

No samples1010In Pliocene to Recent (undifferentiated)90100Miocene (undifferentiated)120220

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

# WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to medium-grained	20	100
Limestone	60	200

	BROOKS CO	UNTY	
of Land Lot 454, 12th Land District Elev.		No.: GGS 184 : 133 (derrick floor)	
Dimea. April 1010	Thickness (feet)	Depth (feet)	
No samples		690	
In Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: cream, crystalline, much calcitized, some granular (in texture), fossiliferous (macroshells, echi and bryozoan remains, and frequent Foraminifera)	inoid	885	
Amphistegina pinarensis var. at 730-740.			
Camerina striatoreticulata abundant at 830-840.			
Middle Eocene: Claiborne Group (Undifferentiated):			
Limestone: cream, considerably calcitized, granular, che coarsely glauconitic at certain levels	• /	1,385	
Lower Eocene(?): Wilcox Group (Undifferentiated):			
Sand: fine to medium-grained, glauconitic, micaceous, py ferous; interbedded clay, dark, grayish-green, micace carbonaceous, laminated	eous,	1,475	
Sand: coarse-grained, subangular, varicolored, grains pale-green quartz at depth		1,605	
Paleocene: Midway Group: Clayton Formation:			
Limestone (or indurated sand): gray, very sandy, glauco (finely disseminated), fossiliferous (Foraminifera)		1,620	
Operculinoides catenula at 1620-1630.			
Indurated sand: gray, fine-grained, glauconitic (finely seminated)		1,710	
Pseudophragmina stephensoni, Operculinoides catenul 1630-1640.	a at .		

	Thickness (feet)	Depth (feet)
Clay: dark-gray to black, fissile, carbonaceous, micaceous; in- terbedded limestone, gray, sandy, coarsely glauconitic	85	1,795
Robulus midwayensis at 1780-1790.		
Limestone: gray, rather dense, somewhat crystalline, sandy, coarsely glauconitic, fossiliferous	100	1,895
Robulus pseudo-mamilligerus at 1790-1800.		
Sand: fine to coarse-grained, angular		1,920
Marl: gray, somewhat indurated, chalky, fossiliferous (some Foraminifera); interbedded limestone, as above	300	2,220
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Marl: gray to brown at depth, chalky, glauconitic, sandy at various levels, micaceous, pyritiferous, fossiliferous (macro- shells and Foraminifera at certain horizons)	785	3,00 <b>5</b>
Glauconite common at 2220-2230.		
Globotruncana cretacea, Anomalina sp. at 2230-2240.		
Sand: fine to medium-grained, indurated, micaceous, phos- phatic, fossiliferous (macroshells); interbedded clay or shale, brown, micaceous, carbonaceous Vaginulina texana at 3100-3110.	130	3,135
In Tuscaloosa Formation:		
Sand: fine to medium-grained, glauconitic; interbedded clay or shale, dark-gray, fissile (splintery), carbonaceous, mica- ceous (finely disseminated)	190	3,325
Shale: dark-gray to black, carbonaceous, fissile, micaceous; interbedded sand, as above	155	3,480
Sand: fine to medium-grained, somewhat indurated, glauconitic	30	3,510
Shale: as above	33	3,543
Sand: fine to medium-grained, somewhat indurated, glaucon- itic; interbedded shale, as above	67	3,610

## WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Sand: coarse-grained, angular, arkosic, glauconitic and finer- grained at certain levels; interbedded clay, green to tan to red (mottled), sandy, micaceous, sideritic at certain horizon	s 240	3,850
Sideritic nodules common at 3620-3630.		

#### Summary:

No samples	690	690
	195	885
Middle Eocene (Claiborne group, undifferentiated)	500	1,385
Lower Eocene(?) (Wilcox group, undifferentiated)	220	1,605
Paleocene (Clayton formation)	615	2,220
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	915	3,135
Upper Cretaceous (In Tuscaloosa formation)	715	3,850

## **Potential Water-Bearing Zones:**

Limestone		195	885
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## Remarks:

All potential water-bearing sands below depth 1,385, probably carrying salt water, hence not suitable as sources of fresh water.

## BROOKS COUNTY

Location: Quitman	Well No.: GGS 469
Owner: City of Quitman	Elev.: 180 <sup>1</sup>
Driller: M. M. Gray	
Drilled: 1955	
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Clay, mottled to pale-green to tan, sandy, limonitic; sand, fine to medium-grained; inclusions of kaolin, white, sandy, mica- ceous; some lignite	80	80
In Miocene (Undifferentiated):		
Clay: pale-green, sandy, cherty; limestone at depth, white, sandy, fossiliferous; dolomitic limestone, brown, saccha- roidal	70	150
Archaias sp. at 100-130.		
Dolomitic limestone at 130-150.		

<sup>&</sup>lt;sup>1</sup>Average elevation taken from State Highway map.

Oligocene (Undifferentiated):	Thickness (feet)	Dep <b>th</b> (feet)
Limestone: gray, dense (calcitized), nodular, fossiliferous.		265
Rotalia byramensis var. at 150-160. Dictyoconus <sup>2</sup> sp. at 160-170. Miliolidae prominent at 190-200.		200
Upper Eocene(?): Jackson Group: Ocala Limestone:		
Dolomitic limestone: light-brown, saccharoidal		304
Summary:		
Pliocene to Recent (undifferentiated)		80
In Miocene (undifferentiated)		150
Oligocene (undifferentiated)		265
Upper Eocene(?) (Ocala limestone)		304
Potential Water-Bearing Zones:		
Limestone		265
Location: 0.5 mi. east of intersection of U.S. Highway 17 on Bryan Neck Road at Richmond Hill Owner: Henry Ford Driller: W. E. Floyd, Jr. Drilled: May 1939	BRYAN COU Well No.: GG Elev.: 14	
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated): Sand: fine-grained, finely disseminated phosphatic gra	ins:	
interbedded clay, dark-gray to tan to red (mottled), so what fissile, lignitic, micaceous	ome-	30
Sand: fine to coarse-grained, arkosic		40
No samples	310	350
In Miocene (Undifferentiated):		
Clay: dark-green, silty, phosphatic; limestone, white, sandy, phosphatic	•	450
-/		
No samples		500

<sup>2</sup>Reworked(?) fossil of middle Eocene age.

	Well Logs	OF THE	COASTAL	Plain	OF	GEORGIA
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	Thickness (feet)	Depth (feet)
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, crystalline (much calcitized), fossiliferous, (abundant bryozoan remains and Foraminifera)	?	500
Asterocyclina nassauensis, Pseudophragmina flintensis, Op- erculinoides floridensis at 500.		

# Summary:

Pliocene to Recent (undifferentiated)	40	40
No samples	310	350
In Miocene (undifferentiated)	100	450
No samples	50	500
In upper Eocene (Ocala limestone)	?	500

# Potential Water-Bearing Zones:

Limestone	?	500
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# **BRYAN COUNTY**

Location: In Pembroke Owner: No. 1 City of Pembroke	Well No.: GGS 459 Elev.: 95
Driller: M. M. Gray Drilling Company Drilled: 1955	
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine to coarse-grained, limonitic, arkosic; interbedded clay, bluish-gray to tan to red (mottled), sandy	30	30
Miocene (Undifferentiated):		
Clay: dark-green, somewhat indurated, blocky, sandy	10	40
Sand: very coarse-grained, arkosic	50	90
Clay: dark-green, sandy; interbedded sand, fine to coarse- grained, arkosic	40	130
Clay: dark-green, sandy, cherty	60	190
Black, phosphatic pebbles prominent at 180-190.		
Clay: as above; interbedded dolomitic limestone, light-brown, sandy, phosphatic; sand, fine to coarse-grained, phosphatic	50	240

	Thickness (feet)	Deptb (feet)
Clay and sand: as above; interbedded limestone, light-gray to white, very dense (much calcitized), sandy, phosphatic	110	35 <b>0</b>
Dark-green chert prominent at 260-270.		
Oligocene (Undifferentiated):		
Limestone: gray to cream at depth, dense (much calcitized), nodular, somewhat sandy, fossiliferous (casts and molds of megafossils and some Foraminifera)	40	390
Rotalia mexicana var. at 350-360.		
Miliolidae abundant 370-380.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream to white at depth, somewhat saccharoidal (much calcitized), fossiliferous (macroshells, bryozoan re- mains, and Foraminifera)	87	477
Macroshells prominent at 390-400.		
Operculinoides floridensis at 390-400.		
Asterocyclina nassauensis, Gypsina vesicularis at 400-410.		
Pseudophragmina flintensis at 420-430.		
Summary:		

#### Summary:

Pliocene to Recent (undifferentiated)	30	30
Miocene (undifferentiated)	320	350
Oliogocene (undifferentiated)	40	390
Upper Eocene (Ocala limestone)	87	477

## **Potential Water-Bearing Zones:**

Limestone		477
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# BULLOCH COUNTY

Location: 3 mi. northeast of Statesboro, 0.1 mi. north-	Well No.: GGS 81
west of Highway 73 (Dover Road), at airfield	Elev.: 171
Owner: No. 2 well at Airfield (City of Statesboro)	
Driller: Stevens Southern Company	
Drilled: November 1942	
	Thickness Depth

	(feet)	(feet)
· · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	

# Pliocene to Recent (Undifferentiated):

Sand: fine-grained	to coarser-grained at depth; some clay,		
brick-red, sandy		80	80

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):	(1000)	(1000)
Clay: gray to yellowish-green, fissile, sandy		100
Sand: fine to coarse-grained, arkosic; clay, as above, but phosphatic	40	140
Clay: dark-green, blocky, phosphatic; interbedded with ton- gues of sand, fine to coarse-grained, phosphatic		260
Black phosphatic pebbles abundant at 140-160.		
Clay: as above; interbedded limestone, light-gray, dense (much calcitized), sandy, phosphatic	20	280
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic		300
Oligocene (Undifferentiated):		
Limestone: cream, massive (much calcitized), nodular, some- what oolitic, fossiliferous (casts and molds of Gastropods and Foraminifera)	100	400
Rotalia mexicana var., Gypsina globula <sup>1</sup> at 300-320. Lepidocyclina mantelli at 340-360.		
Upper Eocene(?): Jackson Group: Ocala Limestone:		
Limestone: cream but somewhat whiter than above, granular, fossiliferous (Foraminifera)	20	420
Gypsina globula <sup>1</sup> at $400-420$ .		
No samples	20	440
In Middle Eocene(?) (Undifferentiated):		
Indurated sand: fine to medium-grained, angular, fossilifer- ous (casts and molds of Pelecypods); some limestone (cave), as above	35	475
Summary:		
Pliocene to Recent (undifferentiated)		80
Miocene (undifferentiated) Oligocene (undifferentiated)		300 400
Upper Eocene (Ocala limestone)		420
No samples	20	440
In middle Eocene(?) (undifferentiated)	35	475
Potential Water-Bearing Zones:		
Limestone	120	420
<sup>1</sup> Reworked(?) fossil of middle Eocene age.		

'Reworked(?) fossil of middle Eocene age.

BUI	LOCH CO	UNTY
	l No.: GGS 7.: 219	378
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, coarser-grained at depth arkosic, finely disseminated phosphatic grains		20
Miocene (Undifferentiated):		
Clay: yellowish-green, sandy, phosphatic at depth; inter- bedded sand, fine to coarse-grained, arkosic		205
First observed phosphatic pebbles at 175-185.		
Sand: fine to coarse-grained, phosphatic		285
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic, fossiliferous (macroshells)		325
Sand: fine to coarse-grained, phosphatic; interbedded dolo mitic limestone, as above; limestone, gray, dense, sandy phosphatic	,	365
Oligocene (Undifferentiated):		
Limestone: cream, massive (much calcitized) nodular, some- what oolitic, cherty, fossiliferous (casts and molds of Gas- tropods and Foraminifera)	<u>.</u>	425
Rotalia mexicana var. at 365-375. Rotalia mexicana var., Gypsina globula¹ at 375-385.		
Limestone: as above, but whiter in color	40	465
In Upper Eocene(?): Jackson Group: Ocala Limestone:		
Limestone: white to cream, rather massive, fossiliferous (some Foraminifera)		540
Gypsina globula common, Lepidocyclina sp. at 465-475. Lepidocyclina sp. common to abundant at 485-495.		

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

Well	LOGS	OF	THE	COASTAL	Plain	OF	GEORGIA

	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: gray, extremely dense (highly calcitized), sandy, finely disseminated phosphatic grains, fossiliferous (casts and molds of megafossils and rare Foraminifera); inter- bedded clay, olive-green, sandy	85	625
Limestone: white, dense (much calcitized), sandy, sparsely glauconitic, fossiliferous (fragments and molds of mega- fossils); interbedded dolomitic limestone, dark-brown, sac- charoidal, sandy	200	825
Dolomitic limestone: dark-brown, saccharoidal, coarsely but abundantly glauconitic	60	885
Marl: gray, somewhat sandy, glauconitic, fossiliferous (Fora- minifera)	36	921
Gyroidina soldanii var., Asterocyclina monticellensis, Lepi- docyclina (Polylepidina) antillea, Cibicides mississippiensis,		

Cibicides westi at 885-895.

## Summary:

Pliocene to Recent (undifferentiated)	<b>20</b>	20
Miocene (undifferentiated)	345	365
Oligocene (undifferentiated)	100	465
In upper Eocene(?) (Ocala limestone)	75	540
Middle Eocene (Claiborne group, undifferentiated)	381	921

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	80	285
Limestone	175	540
Limestone <sup>1</sup>	285	825

# BULLOCH COUNTY

Owner: No. 1 Willow Hill Elementary School Driller: Layne-Atlantic Company	No.: GGS	430
Drilled: September 1954	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, arkosic; and some clay, bluish- gray to red (mottled), sandy	40	40

<sup>1</sup>Not a porous limestone, but should furnish some water.

Miocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: yellowish-green, sandy; interbedded sand, fine to coarse-grained		118
Sand: fine to coarse-grained; interbedded clay, green, sandy, phosphatic (at depth); thin tongues of limestone, white, sandy, phosphatic	230	348
Sand, fine to coarse-grained at 118-130.		
Sand, fine to coarse-grained at 135-150.		
Sand, fine to coarse-grained at 203-216.		
Sand, fine to coarse-grained at 223-250.		
Sand, fine to coarse-grained at 268-276.		
Sand, fine to coarse-grained at 282-340.		
Oligocene (Undifferentiated):		
Limestone: dark-gray to pinkish to cream, massive, nodular (much calcitized), somewhat oolitic, cherty, fossiliferous (casts and molds of Gastropods and Foraminifera)	108	456
Rotalia mexicana var., Asterigerina subacuta at 350-360.		

Operculinoides sp. at 360-370.

Lepidocyclina sp., Asterocyclina<sup>1</sup> sp. at 386-396.

Eponides by ramensis at 396-406.

## Summary:

Pliocene to Recent (undifferentiated)	40	40
Miocene (undifferentiated)	308	348
Oligocene (undifferentiated)	108	456

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	12	130
Sand: fine to coarse-grained	15	150
Sand: fine to coarse-grained	13	216
Sand: fine to coarse-grained	<b>27</b>	250
Sand: fine to coarse-grained	8	276
Sand: fine to coarse-grained	58	340
Limestone	108	456

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

Owner: No. 1 Nevils Elementary School Driller: Layne-Atlantic Company	No.: GGS	432
Drilled: November 1954	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, arkosic; some clay, bluish-gray to tan to red (mottled), sandy, limonitic		20
Miocene (Undifferentiated):		
Clay: yellowish-green to purple, sandy	35	55
Clay: yellowish-green, sandy, cherty; interbedded sand, fine to coarse-grained, phosphatic		270
Brown phosphatic pebbles and pale-green chert prominent at 65-70.		
Fine to coarse-grained phosphatic sand at 85-105.		
Sand: fine to coarse-grained, phosphatic	40	310
Clay: dark-green, sandy, phosphatic; interbedded limestone, white, sandy		330
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic, fossiliferous (macroshells)		350
Clay: dark-green to gray, very sandy, phosphatic, fossilifer- ous (macroshells)		370
Limestone: light to dark-gray, extremely dense (much calci- tized), very sandy, coarsely phosphatic, fossiliferous (frag- ments and casts of megafossils)		380
Oligocene (Undifferentiated):		
Limestone: pinkish to cream, very dense and massive (much calcitized), nodular, somewhat oolitic, cherty, fossiliferous (casts and molds of megafossils and some Foraminifera)	ł	460
Asterocyclina <sup>1</sup> sp., Gypsina globula <sup>1</sup> , Pyrgo sp., Rotalia mexicana var., at 380-385. Dictyoconus <sup>1</sup> sp. at 395-400.		
Asterocyclina sp., $Operculinoides^1$ sp. at 415-420. Argyrotheca sp. at 435-455.		

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

Summary:	Thickness (feet)	Depth (feet)
·	20	00
Pliocene to Recent (undifferentiated)		$\frac{20}{380}$
Miocene (undifferentiated) Oligocene (undifferentiated)		$\frac{380}{460}$
Ongocene (undifferentiated)		400
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		105
Sand: fine to coarse-grained	40	310
Limestone		460
Location: In Brooklet	BULLOCH CO Well No.: GGS Elev.: 159 <sup>1</sup>	
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, angular, arkosic; interbea clay, mottled, sandy		50
Miocene (Undifferentiated):		
Clay: pale, yellowish-green, sandy, phosphatic and fossili ous at depth; interbedded sand, fine to coarse-grained, p phatic	hos-	300
Limestone, white, sandy, phosphatic, with macroshells 50-60.	s at	
Black phosphatic pebbles common at 50-60.		
Macroshells prominent at 150-160.		
Dolomitic limestone: light-brown, saccharoidal, sandy, p phatic		310
No samples		325
	x0	020
In Oligocene (Undifferentiated):		
Limestone: cream, massive, somewhat granular and nodu	ılar.	

Limestone: cream, massive, somewhat granular and nodular,		
somewhat saccharoidal and whiter at depth, cherty, fossili-		
ferous (casts and molds of Gastropods, echinoid and bryo-		
zoan remains, Ostracods, and Foraminifera)	140	465

 $<sup>{}^{1}\</sup>mathrm{A} \overline{\mathbf{v}} \mathrm{erage}$  elevation taken from State Highway map.

Pyrgo sp., Cibicides americanus, Cibicides lobatulus, Gypsina globula<sup>2</sup> at 325-335. Lepidocyclina sp., Dictyoconus<sup>2</sup> sp., Rotalia mexicana var., Asterigerina subacuta, Eponides byramensis, Quinqueloculina sp. at 345-355.

## Upper Eocene: Jackson Group: Ocala Limestone:

Limestone:	light-gray,	somewhat	calcitized,	fossiliferous		
(abundant	t bryozoan re	emains and	some Foram	inifera)	50	515

Robulus arcuato-striatus var. carolinianus, Frondicularia sp., Gypsina globula, Nonion planatus, Alabamina obtusa, Eponides jacksonensis, Nodosaria fissicostata, Globorotalia cocoaensis, Planulina cocoaensis at 465-475. Operculinoides floridensis at 485-495.

Planularia sp. at 495-505.

#### Summary:

Pliocene to Recent (undifferentiated)	50	50
Miocene (undifferentiated)	260	310
No samples	15	325
In Oligocene (undifferentiated)	<b>140</b>	465
Upper Eocene (Ocala limestone)	50	515

#### Potential Water-Bearing Zones:

Limestone	190	515
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## **BULLOCH COUNTY**

Location: In City of Portal	Well No.: GGS 571
Owner: City of Portal	Elev.: 295 <sup>1</sup>
Driller: Layne-Atlantic Company	
Drilled: 1959	
	Thickness Depth (feet) (feet)

#### Miocene (Undifferentiated):

Clay: pale-yellowish-green with red streaks (mottled), very		
sandy, limonitic	36	36
Sand: medium to coarse-grained, subangular, arkosic	20	56
Clay: pale-yellowish-green to pale-brownish-gray, sandy	102	158
Average elevation taken from State Highway map.		

<sup>2</sup>Reworked(?) fossil of middle Eocene age.

47

Depth

(feet)

Thickness

	Thickness (feet)	Depth (feet)
Clay: as above, but much sandier	144	302
Clay: as above; some limestone, white, sandy	41	343
No samples		363
Sand: coarse-grained, subangular, phosphatic, fossiliferous (a coquina)		390
In Oligocene (Undifferentiated):		
Limestone: cream, rather massive, somewhat nodular, fossili- ferous (molds and impressions of Gastropods, bryozoan re- mains, and some Foraminifera)		444
Pyrgo sp., Rotalia mexicana var. at 398-423. Gypsina globula <sup>2</sup> at 423-444.		
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, much calcitized, somewhat granular, fos- siliferous (bryozoan remains and some Foraminifera)	42	486
Lepidocyclina sp., Gypsina globula at 444-465.		
Limestone: white, calcitized, somewhat fossiliferous (bryo- zoan remains and some Foraminifera)		495
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: light-gray, rather dense, much calcitized, crystal- line, fossiliferous (bryozoan remains, some of which are	10	505
impregnated with glauconite)	10	909
Indurated sand: white to light-gray, fine-grained, fossilifer- ous (impressions and molds of megafossils)		526
Summary:		
Miocene (undifferentiated)	390	390
In Oligocene (undifferentiated)		444
In upper Eocene (Ocala limestone)		495
Middle Eocene (Claiborne group, undifferentiated)	31	526
Potential Water-Bearing Zones:		
Limestone	_ 105	495

<sup>2</sup>Reworked(?) fossil of middle Eocene age.

Owner: No. 1 USGS Test Hole	Elev.: 129		
Driller: Scott Drilling Company			
Drilled: July 1946		Denth	
	Thickness (feet)	Depth (feet)	
Middle Eocene: Claiborne Group: Lisbon Formation:			
Sand: fine to coarse-grained, lime nodules; some clay, bri red, sandy		30	
Upper Cretaceous: Tuscaloosa Formation:			
Sand: fine to coarse-grained, angular, arkosic, micaceous; terbedded kaolin, black to light-gray to white, somew sandy, micaceous	hat	602	
Kaolin, black to light-gray, lignitic, very micaceous at 30-	75.		
Kaolin, gray to red (mottled), micaceous, sandy at 175-2	210.		
Kaolin, gray to red (mottled), sandy, micaceous at 495-5	05.		
Kaolin, gray to red (mottled), sandy, ferruginous, mi ceous; some sand, coarse-grained at 585-602.	ca-		
Basement Complex (Undifferentiated):			
Clay: dark-green, highly micaceous, sericitic		620	
Summary:			
Middle Eocene (Lisbon formation)		30	
Upper Cretaceous (Tuscaloosa formation)		602	
Basement complex (undifferentiated)		620	
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		245	
Sand: fine to coarse-grained		305	
Sand: fine to coarse-grained		495	
Sand: fine to coarse-grained		565	

	BURKE COU	JNTY
Location: 3 mi. north of Waynesboro on Briar CreekWellOwner: No. 1 John ThompsonElev.Driller: J. RowellDrilled: August 1946		IS 139
Drined: August 1940	Thickness (feet)	Depth (feet)
No samples	44	44
In Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: light-gray, dense (much calcitized), sandy, so what carbonaceous, finely glauconitic, phosphatic, fos ferous at depth (Ostracods, Foraminifera, and ma shells); interbedded marl, light-gray, glauconitic	sili- cro-	140
Clay, light-gray, somewhat indurated, finely glauconitic 100-110.	e, at	
Macroshells common at 120-140.		
No samples		170
Sand: fine to coarse-grained, coarsely glauconitic	?	170
Summary:		
No samples In middle Eocene (Claiborne group, undifferentiated)		44 170
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained Sand: fine to coarse-grained		140 170
	BURKE CO	UNTY

Location: 2.5 mi. east of Greens Cut	Well No.: GG	S 220
Owner: No. 3 well Three Creeks Oil Company		
Drilled: May 1923		
	Thickness (feet)	Depth (feet)

# Residuum:

Clay:	reddish-brown,	very	sandy,	limonitic;	some	residual		
lime	stone						30	30

Well Logs of the Coastal Plain of Georgia		51
Upper Eocene: Jackson Group: Barnwell Formation:	Thickness (feet)	Depth (feet)
		*
Limestone: white, dense, crystalline, sandy, sparsely phos- phatic, fossiliferous (macroshells, echinoid and bryozoan remains, and some Foraminifera)	45	75
Elphidium texanum, Nonion inexcavatus, Valvulineria jacksonensis, Cibicides americanus var. antiquus at 30-75.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: light-gray to pale, yellowish-green, sandy, limey, hard lime nodules, fossiliferous at certain levels (echinoid and bryozoan remains, Ostracods, and Foraminifera)	54	129
Spiroplectammina mississippiensis var., Textularia dibol- lensis, Nonion inexcavatus, Nonion advena, Discorbis georgiana, Siphonina claibornensis, Valvulineria danvil- lensis var. gyroidinoides, Cibicides pseudoungerianus var. lisbonensis, Cibicides americanus var. antiquus, Cibicides danvillensis at 116-118.		
Clay: dark-green, blocky, somewhat indurated and tough, sandy	16	145
Sand: fine to medium-grained; clay, light-gray to dark-brown, block, carbonaceous, finely disseminated flakes of mica	16	161
Clay: dark-brown to black, lignitic, micaceous, sandy, coarse grains of sand	25	186
Clay: as above, but light-gray, very sandy	9	195
Upper Cretaceous: Tuscaloosa Formation:		
Sand: coarse-grained, angular, arkosic, many grains coated with white kaolin; interbedded clay (or kaolin), white to gray to red to purple (mottled), micaceous, somewhat sandy	644	839
Clay: light-gray to tan to olive-green to red (mottled), side- ritic, micaceous, greasy; interbedded sand, very coarse- grained, angular, arkosic	86.7	925.7
Stamou, angular, arnooid	00.1	020.1

# Summary:

Residuum	30	30
Upper Eocene (Barnwell formation)	45	75
Middle Eocene (Lisbon formation)	120	195
Upper Cretaceous (Tuscaloosa formation)		925.7

· · · · · · · · · · · · · · · · · · ·	Fhickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	. 3	129
Sand: fine to coarse-grained	13	208
Sand: fine to coarse-grained	13	312
Sand: fine to coarse-grained	25	356
Sand: fine to coarse-grained	23	421
Sand: fine to coarse-grained	34	538

## **Remarks:**

Other water-bearing sands are present below depth of 538 (above), but samples are not of sufficient excellence to permit delineation.

В	BURKE COUNTY Well No.: GGS 316	
Location: Approximately 2.5 mi. east of Greens Cut W Owner:No. 2 well Three Creeks Oil Company Drilled: 1923		
	Thickness (feet)	Depth (feet)
No samples	128	128
In Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: cream to pale yellowish-green, somewhat sandy, glau conitic, limey, with hard lime nodules, fossiliferous (macro shells, echinoid and bryozoan remains, Ostracods, an Foraminifera)	o- Id	190
Nonion advena, Discorbis georgiana, Gyroidina soldan var., Cibicides americanus var. antiquus, Cibicides pseud ungerianus var., Cibicides danvillensis, Cibicides westi 2 128-144.	<b>0-</b>	
Sand: fine to coarse-grained, subangular, sparsely phospha	tic24	214
Sand: fine to coarse-grained, subrounded; clay, dark-green somewhat indurated and fissile, micaceous; claystone, dark brown, dense, cherty	ζ-	222
Sand: as above; clay, dark-green to dark-brown to black somewhat fissile, micaceous		278
In Upper Cretaceous: Tuscaloosa Formation:		
Sand: fine to coarse-grained, subangular, arkosic, man grains coated with red clay		318

	Thickness (feet)	Depth (feet)
Clay: black, fissile, lignitic, micaceous; sand, as above	2	320
Sand: fine to coarse-grained, subangular, abundantly limo- nitic	7	327
Sand: coarse-grained, subangular, arkosic; interbedded kao- lin, white, micaceous, sandy	35	36 <b>2</b>
Clay: light-gray to tan to red to purple (mottled), micaceous, sandy	53	415
No samples	613	1,028

## In Basement Complex (Undifferentiated):

Crystalline rock: sand and clay; as above	3	1,031
Crystalline rock: as above	2	1,033?

#### Summary:

No samples	128	128
In middle Eocene (Lisbon formation)	150	<b>278</b>
In Upper Cretaceous (Tuscaloosa formation)	137	415
No samples	615	1,028
In basement complex (undifferentiated)	5	1,033?

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	<b>44</b>	<b>234</b>
Sand: fine to coarse-grained	40	318
Sand: fine to coarse-grained	35	362

#### BURKE COUNTY

Location: Near Midville	Well No.: GG	S 391
<b>Owner:</b> Midville Consolidated School	Elev.: 190	
Driller: Virginia Supply and Well Company		
Drilled: September 1954		
	Thickness (feet)	Depth (feet)

## Miocene (Undifferentiated):

Clay: olive-green to tan to red (mottled), limonitic, sandy	8	8
Clay: red to purple (mottled), sandy	52	60

## Upper Eocene: Jackson Group: Barnwell Formation:

Marl: yellowish-green to brown, carbonaceous, sandy; limestone, white to yellow, rather dense, nodular, saccharoidal,

	Thickness (feet)	Depth (feet)
sandy, cherty, fossiliferous, (fragments and casts of mega- fossils, echinoid and bryozoan remains, and Foraminifera, latter at depth)	42	102
Nonion advena, Nonion inexcavatus, Valvulineria jackson- ensis, Discorbis assulata, and Cibicides lobatulus at 78-102.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Sand: fine to coarse-grained, subangular, sparsely phos- phatic, with brown pebbles; limestone, pale, yellowish- green, dense, saccharoidal, sparsely phosphatic, sandy, fos- siliferous (casts and molds of megafossils, echinoid and		
bryozoan remains)	108	210
Limestone: pale, yellowish-green, dense, very sandy, sparsely phosphatic, fossiliferous (casts and molds of megafossils)	40	250
Summary:		
Miocene (undifferentiated)	60	60

Milocomo (unumiloromonatou)	00	00
Upper Eocene (Barnwell formation)	42	102
Middle Eocene (Lisbon formation)	<b>148</b>	250

## **Potential Water-Bearing Zones:**

Sand	108	210
Limestone	40	250

	BURKE COUL	NTY
Location: Near Girard Owner:Girard Consolidated School Driller: Virginia Supply and Well Co. Drilled: September 1954	Well No.: GGS Elev.: 230	5 392
-	Thickness (feet)	Depth (feet)

## Miocene (Undifferentiated):

Clay: light to red (mottled), micaceous, very sandy 60 60

## Upper Eocene: Jackson Group: Cooper Marl:

Sand: fine to coarse-grained, subangular, micaceous; limestone, white, somewhat saccharoidal, dense, sandy, sparsely

phosphatic, fossiliferous (macroshells, echinoid and bryo-	Thickness (feet)	Depth (feet)
zoan remains, Ostracods, and Foraminifera)	115	175
Spiroplectammina mississippiensis, Nonion advena, Nonion inexcavatus, Elphidium texanum, Valvulineria jacksonensis, Discorbis globulo-spinosa, Discorbis assulata, Guttulina irregularis, Sigmomorphina semitecta var., Reussella oligo- cenica at 103-137.		

# Summary:

Miocene (undifferentiated) Upper Eocene (Cooper marl)	$\begin{array}{c} 60\\ 115 \end{array}$	60 175
Potential Water-Bearing Zones:		

Limestone		<b>20</b>	157
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## BURKE COUNTY

Owner: No. 1 W. A. Wilkins	Well No.: GGS 520 Elev.: 280		
Drilled: 1888	Thicl (fe	(ness et)	Depth (feet)
No samples		40	40
In Eocene (Undifferentiated):			
Sand: fine-grained; clay, pink, sandy, micaceous	·	20	60
Sand: fine to medium-grained, angular, with inclusions residual limestone		90	150
Sand: coarse-grained; limestone, white to gray, dense (my calcitized), sandy, fossiliferous (macroshells, and so bryozoan remains)	ome	80	230
Sand: fine to medium-grained, sparsely phosphatic; may yellowish-green, somewhat indurated, silty, finely disse nated phosphatic grains, carbonaceous, micaceous	mi-	10	240
Marl: as above, but fossiliferous (Radiolaria, Ostracods, a Foraminifera)		50	290
Cibicides americanus var., Cibicides cf. C. refulgens at 2 290.	40-		
Sand: fine-grained; marl, as above		20	310

	Thickness (feet)	Depth (feet)	
Clay: yellowish-green, noncalcareous, somewhat indurated, carbonaceous, micaceous; some sand, coarse-grained, phos-			
phatic	30	340	
No samples	40	380	
In Upper Cretaceous <sup>1</sup> : Tuscaloosa Formation:			
Sand: coarse-grained, angular, grains that resemble rose quartz	30	410	
Sand: fine to coarse-grained, arkosic; some clay or kaolin, gray to tan to red (mottled), sandy, micaceous	90	500	
Clay: brick-red, sandy, micaceous	200	700	:
Summary:			
No samples	40	40	
In Eocene (undifferentiated)		340	
No samples	40	380	
In Upper Cretaceous (Tuscaloosa formation)	320	700	
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained	30	410	
Remarks:			
Samples on this well of poor quality, hence it is not feasible t water-bearing sands below a depth of 410 feet.	o pick add	litional	

## CALHOUN COUNTY

	ll No.: GGS v.: 349	192
	Thickness (feet)	Depth (feet)
No samples	400	400
In Paleocene: Midway Group: Clayton Formation:		
<ul> <li>Sand: medium to coarse-grained, angular, abundantly glau conitic; marl, gray, micaceous, carbonaceous; limestone light-gray, sandy, glauconitic, fossiliferous (macroshells)</li> <li>Robulus midwayensis, Anomalina midwayensis at 410-420</li> </ul>	40	440

<sup>&</sup>lt;sup>1</sup>According to McCallie's log of this well (USGS, WSP 341, p. 167) probable top of Upper Cretaceous at 310.

Well Logs of the Coastal Plain of Georgia	L	57
	Thickness (feet)	Depth (feet)
Limestone: cream, nodular, fossiliferous (macroshells, bryo- zoan remains and Foraminifera)	120	560
<b>Upper</b> Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Sand <sup>1</sup> : fine to coarse-grained, angular grains	40	600
Marl: gray, silty, micaceous, glauconitic, fossiliferous (macro- shells, Ostracods, and Foraminifera); interbedded sand, fine to medium-grained, angular, glauconitic, phosphatic, fossiliferous (macroshells at certain horizons)	1,420	2,020
Guembelina sp. at 650-660. Anomalina pseudopapillosa at 680-690. Kyphopyxa christneri at 1480-1510. Vaginulina texana at 1540-1570.		
Sand: fine to medium-grained, angular, glauconitic, mica- ceous, fossiliferous (macroshells)		2,102
Sand: fine to medium-grained, somewhat indurated, highly micaceous, phosphatic, fossiliferous (macroshells)	68	2,170
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, pale-green, micaceous, sandy	460	2,630
Clay, or shale: dark-gray to black, fissile, carbonaceous, mi- caceous (finely disseminated); interbedded sand, fine to medium-grained, angular, glauconitic, micaceous	178	2,808
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, pale-green, somewhat iron-stained, micaceous, sandy	112	²2,920

# Summary:

No samples	400	400
In Paleocene (Clayton formation)	160	560
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	1,610	2,170
Upper Cretaceous (Tuscaloosa formation)	750	²2,920

# **Potential Water-Bearing Zones:**

Limestone	120	560
Sand: fine to coarse-grained	40	600
Sand: fine to coarse-grained	80	950

<sup>1</sup>May represent basal Clayton formation. <sup>1</sup>Not reported below 2,920.

## CALHOUN COUNTY

Location: 6 ft. west and 15 ft. south of north footing	Well No.: GGS 330
of steel water tower in Arlington	Elev.: 306
Owner: No. 2 City of Arlington	

Driller: Layne-Atlantic Company

Drilled: January 1953

			Thickness (feet)	Depth (feet)

## **Residuum:**

Clay: pale olive-green to tan to red to purple (mottled),		
very sandy, limonitic	125	125
Sand: fine to coarse-grained, angular	30	155
No samples	20	175

## In Middle Eocene: Claiborne Group (Undifferentiated):

Sand: fine to coarse-grained, angular, somewhat phosphatic,		
fossiliferous (macroshells); interbedded marl, pale-green		
to light-gray, silty, carbonaceous, micaceous, fossiliferous		
(some Foraminifera); limestone, light-gray, dense, very		
sandy, glauconitic, fossiliferous (macroshells, some bryo-		
zoan remains, and Foraminifera)	185	360

Asterigerina lisbonensis at 228-239.

Discorbis yeguaensis at 269-280.

Glauconite prominent at 341-351.

## Lower Eocene(?): Wilcox Group (Undifferentiated):

Limestone: light-gray, dense, sandy, abundantly glauconitic	5	365
Clay: dark-gray, silty, carbonaceous, micaceous	17	382

#### Summary:

Residuum	155	155
No samples	20	175
In middle Eocene (Claiborne group, undifferentiated)	185	360
Lower Eocene(?) (Wilcox group, undifferentiated)	22	382

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	 155
Sand: fine to coarse-grained	 354

## Remarks:

Additional aquifers, as for example the Clayton formation, occur in this area at depths lower than the total depth (382) of the above described well. Quality of samples on this well is poor; much better cuttings could have been collected. Moreover, the sands penetrated during drilling of this well were reported dry. This report is considered questionable. Many of these sands might have been sealed-off by mud during drilling, hence appeared to be dry when tested.

## CALHOUN COUNTY

Location: 12 ft. north and 6 ft. west of southwest footing	Well No.: GGS 331	
of water tower, ½ block north of Courthouse, west side	Elev.: 252	
of Highway 55, in Morgan		
Owner: No. 1 City of Morgan		
Driller: Layne-Atlantic Company		
Drilled: December 1952		
	Thickness Dep (feet) (fee	

#### Residuum:

Sand: fine to coarse-grained, subangular, limonitic; inter- bedded clay, light-gray with red streaks (somewhat mot- tled), sandy	4	4
Clay: light-gray to pale-brownish-green with tan to red streaks (mottled), very sandy, limonitic	20	24
Upper Eocene(?): Jackson Group: Ocala Formation:		
Limestone: white to cream, rather dense and massive, some- what saccharoidal, sandy, fossiliferous (molluscan shells, bryozoan remains, and Foraminifera)	10	34
Lepidocyclina sp., Camerina sp. at 24-34.		
In Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: white to light-gray, dense, crystalline, coarsely but sparsely glauconitic, sandy, somewhat fossiliferous (molluscan shells, bryozoan remains, Ostracods, and Fora- minifera); interbedded clay, light-gray, sandy, carbona- ceous, micaceous; indurated sand or sandstone, pale-green, fine-grained, very dense, highly siliceous, micaceous, car-		

bonaceous 81 115

Nonion advena, Cibicides pseudoungerianus var., Cibicides cf. C. westi at 45-55. Cibicides westi at 55-65.

Asterigerina lisbonensis common at 65-75.

Tallahatta Formation:	Thickness (feet)	Depth (feet)
<ul> <li>Sand: fine to coarse-grained, subangular, indurated and coarsely glauconitic at certain levels, sparsely phosphatic, fossiliferous at certain levels (fish teeth, molluscan shells, and Foraminifera); interbedded clay, light-gray to pale-green, silty, carbonaceous, micaceous, fossiliferous (Radio-laria, small molluscan shells and Foraminifera)</li> <li>Nonion advena, Discorbis sp., Gyroidina soldanii var., Valvulineria jacksonensis var., Cibicides danvillensis (common), Cibicides blanpiedi at 115-125.</li> </ul>	95	210
Lower Eocene: Wilcox Group (Undifferentiated):		
Marl: light-gray to pale-brownish-green, somewhat lami- nated, silty, glauconitic, carbonaceous, micaceous, fossili- ferous (Foraminifera)	25	235
Spiroplectammina wilcoxensis, Discorbis midwayensis, Val- vulineria wilcoxensis, Valvulineria scrobiculata, Anomalina acuta at 210-215.		
Clay: dark-gray, silty, somewhat glauconitic, lignitic, mica- ceous, pyritiferous, fossiliferous (microfossils); interbed- ded limestone, white to light-gray, coarsely glauconitic, sandy, fossiliferous (macroshells, Ostracods and Fora- minifera)	125	360
In Paleocene: Midway Group: Clayton Formation:		
Sand: fine to medium-grained, subangular, abundantly glau- conitic, some coarse, subangular, pale-green grains; inter- bedded clay, light-gray, blocky, micaceous to black, some- what laminated, finely micaceous, carbonaceous, fossilifer- ous (Ostracods and Foraminifera)	20	380
Indurated sand: light-gray, fine-grained, subangular, glauco- nitic (finely disseminated grains), micaceous, fossiliferous (macroshells, Ostracods, and Foraminifera); interbedded clay, dark-gray to black, laminated, silty, finely micaceous, carbonaceous	50	430
Nodosaria affinis, Siphonina prima, Bulimina cacumenata, Sigmomorphina soldadoensis, Cibicides newmanae, Anoma- lina midwayensis at 380-390.		
Robulus midwayensis, Discorbis midwayensis, Eponides lotus, Bulimina cacumenata (common), Operculinoides cate- nula (common), Anomalina midwayensis at 390-400.		

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Limestone: white to light-gray, rather dense and crystalline,		
somewhat softer at depth, sparsely glauconitic, sandy to		
very sandy at depth, pyritiferous at certain levels, fossili-		
ferous (macroshells, Bryozoa, Ostracods and Foraminifera).		657

## Upper Cretaceous: Providence Sand:

**1**89

Marl: dark-bluish-gray, somewhat chalky, micaceous, pyriti- ferous, fossiliferous (macroshells, Ostracods, and Fora- minifera)	10	667
Guembelina sp., Globotruncana sp., Anomalina pseudopapil- losa at 657-667.		

#### Summary:

Residuum	<b>24</b>	<b>24</b>
Upper Eocene(?) (Ocala limestone)	10	<b>34</b>
In middle Eocene (Lisbon formation)	81	115
Middle Eocene (Tallahatta formation)	95	<b>210</b>
Lower Eocene (Wilcox group, undifferentiated)	150	360
In Paleocene (Clayton formation)	297	657
Upper Cretaceous (Providence sand)	10	667

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	95	210
Sand: fine to coarse-grained	<b>20</b>	380
Limestone	227	657

#### **Remarks:**

Cuttings are thought to be of rather poor quality in intervals 360-380 and 595-657. Thus, the abundantly glauconitic sand in interval 360-380 is characteristic of the lower Wilcox rather than the Paleocene. Here the top of the Paleocene is therefore in doubt.

#### CALHOUN COUNTY

Location: 0.09 mi. north of Highway 37, 54 ft. west of Seaboard Air Line RR., 30 ft. east of reservoir in Edison	Well No.: GGS Elev.: 312	353
Owner: No. 2 City of Edison Driller: Layne-Atlantic Company Drilled: July 1955		
	Thickness (feet)	Depth (feet)
No samples		15

#### In Residuum:

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, angular, limonitic, and con- siderable residual limestone		50
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: gray, dense, sandy, glauconitic (finely dissemi- nated grains), fossiliferous (a coquina at certain levels, echinoid and bryozoan remains, and some Foraminifera); interbedded marl, light-gray, silty, glauconitic, somewhat micaceous, fossiliferous (Ostracods and Foraminifera); sand, fine to coarse-grained, angular	55	105
Tallahatta Formation:		
Sand: fine to coarse-grained, subangular, sparsely phos- phatic; interbedded clay, gray to yellowish-green, sandy, carbonaceous, micaceous		175
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: gray, dense, crystalline, sandy, coarsely glauco- nitic, fossiliferous (fragments and molds of megafossils)		190
Clay: dark-gray, sandy, carbonaceous, micaceous, pyritiferous	110	300
Sand: fine to medium-grained, subangular, abundantly glauco- nitic	25	325
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, grains of pale- green quartz; clay, light-gray to brown to red (mottled) blocky, sandy, carbonaceous, bauxitic(?)	40	365
Indurated sand: fine-grained, somewhat argillaceous, glauco- nitic, fossiliferous (macroshells and Foraminifera)	25	390
Operculinoides catenula at 340-390.		
Limestone: white, gray at depth, dense, crystalline, sandy, fossiliferous (megafossils, bryozoan remains, and Fora- minifera)	. 115	505
Operculinoides catenula common at 390-433.		

	Thickness (feet)	Depth (feet)			
Sand: fine to coarse-grained, angular; clay, yellow to tan, somewhat sandy		515			
Summary:					

No samples	15	15
In residuum	35	50
Middle Eocene (Lisbon formation)	55	105
Middle Eocene (Tallahatta formation)	<b>70</b>	175
Lower Eocene (Wilcox group, undifferentiated)	150	325
Paleocene (Clayton formation)	190	515

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	<b>61</b>	166
Sand: fine to coarse-grained	65	365
Limestone	115	505
Sand: fine to coarse-grained	10	515

# CAMDEN COUNTY

Location: St. Marys	Well No.: GGS 54
<b>Owner:</b> St. Marys Kraft Corporation	Elev.: 13
Driller: Layne-Atlantic Company	
	Thickness Depth (feet) (feet)

## **Pliocene to Recent (Undifferentiated):**

Sand: fine to coarse-grained, finely disseminated phosphatic grains; interbedded clay, dark-gray, lignitic, micaceous	30	30
Sand: medium to coarse-grained, rounded, phosphatic	28	58
Limestone: dark-gray, very dense (highly calcitized), sandy, sparsely phosphatic	29	87
Limestone: light-gray, very dense (highly calcitized), some- what saccharoidal, sandy, sparsely phosphatic, fossilifer- ous (casts and impressions of megafossils)	20	107
Sand: medium to very coarse-grained, rounded, phosphatic; clay, gray, silty	63	170

# Miocene (Undifferentiated):

Clay:	dark-green,	sandy,	phosphatic,	cherty;	interbedded		
sand, fine to coarse-grained				160	330		

	Thickness (feet)	Depth (feet)
Dolomitic limestone: light-brown, saccharoidal, sandy, phos-		
phatic	20	350
Sand: fine to coarse-grained, phosphatic; dolomitic limestone (cave) as above	20	370
Clay: green, sandy, phosphatic, fossiliferous (macroshells); interbedded limestone, white, dense (much calcitized), sandy, phosphatic, fossiliferous (macroshells)	100	470
Dolomitic limestone: brown, saccharoidal, sandy, phosphatic; sand, fine to medium-grained, phosphatic	20	490
Clay: dark-green, sandy, coarsely phosphatic	50	540
Oligocene (Undifferentiated):		
Limestone: light-gray to white, dense (much calcitized), mas- sive, fossiliferous (molds and fragments of megafossils and bryozoan remains, and some Foraminifera)	20	560
Discorbis subaraucana, Siphonina advena at 540.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: as above; interbedded dolomitic limestone, brown, saccharoidal	356	916
Operculinoides sp. at 560.		
Pseudophragmina flintentis at 600.		
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: as above; interbedded dolomitic limestone, dark- brown, saccharoidal	144	1,060
Summary:		
Pliocene to Recent (undifferentiated)	170	170
Miocene (undifferentiated)		540
Oligocene (undifferentiated)	20	560
Upper Eocene (Ocala limestone)		916
Middle Eocene (Claiborne group, undifferentiated)	144	1,060
Potential Water-Bearing Zones:		

Sand: fine to coarse-grained	63	170
Sand: fine to coarse-grained	20	370
Sand: fine to coarse-grained	10	490
Limestone	320	<b>860</b>

## CAMDEN COUNTY

	CAMDEN COUNT	
Decate	Well No.: GC Elev.: 11	<del>3</del> S 364
	Thickness (feet)	Depth (feet)
Miocene to Recent (Undifferentiated):		
Sand: fine-grained, finely phosphatic		25
Clay: dark-gray, sandy, micaceous, carbonaceous, fossilif ous (macroshells)		42
Sand: fine to coarse-grained		66
Limestone: gray to light-brown, dense (much calcitize somewhat dolomitized, sandy, finely but sparsely ph phatic, fossiliferous (molds and impressions of megafos	105-	120
Sand: coarse-grained (up to size of gravel), coarsely photoc; fragments of limestone as above		330
Dolomitic limestone: light-brown, saccharoidal, sandy, ph phatic; some coarse, gravelly sand as above		368
Clay: dark-green, sandy; much cave from above		410
Sand: fine to coarse-grained, phosphatic; interbedded lin stone, white, dense (much calcitized), sandy, phospha fossiliferous (macroshells); some dolomitic limestone	.tic,	508
Oligocene (Undifferentiated):		
Limestone: light-gray, very dense (highly calcitized), no lar, saccharoidal, fossiliferous (macroshells, bryozoan mains, and some Foraminifera)	re-	530
Asterigerina sp., Siphonina advena, Discorbis assulo Cibicides mississippiensis at 508-530.	nta,	
Jpper Eocene: Jackson Group: Ocala Limestone:		
Limestone: as above; interbedded dolomitic limestone depth		953

Operculinoides sp., Gypsina globula at 530-552.

	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone as above; interbedded dolomitic limestone		1,190
Dictyoconus sp. at 953-983.		

### Summary:

Miocene to Recent (undifferentiated)	508	508
Oligocene (undifferentiated)	22	530
Upper Eocene (Ocala limestone)	423	953
Middle Eocene (Claiborne group, undifferentiated)	237	1,190

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	<b>24</b>	66
Sand: coarse-grained (up to gravel size)	100	220
Sand: fine to coarse-grained	40	450
Limestone	373	823

## **Remarks:**

Samples of poor quality.

	CAMDEN COUNTY		
Owner: No. 4 St. Marys Kraft Corporation	Well No.: G( Elev.: 14 <sup>1</sup>	ell No.: GGS 365 ev.: 14 <sup>1</sup>	
Driller: Layne-Atlantic Company Drilled: October 1953			
	Thickness (feet)	Depth (feet)	
No samples		65	
In Pliocene to Recent (Undifferentiated):			
Limestone: dark-brownish-gray, saccharoidal, massive, sand sparsely phosphatic, fossiliferous (molds and impressio of megafossils)	ons	92	
Sand: fine-grained, subangular to subrounded; some lin stone, as above		112	
Dolomitic limestone: white, saccharoidal, sandy, coarse-su rounded grains of sand and some coarse-grained, jet-bla phosphatic grains; fragments of clay, dark-green, sandy	lck	123	

<sup>1</sup>Average elevation taken from State Highway map.

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Lithology as above but with more clay, dark-green, sandy		154
Clay: dark-green, sandy		336
Clay: as above; dolomitic limestone, brown, saccharoidal, sandy, phosphatic		458
Lithology as above; fragments of indurated sand, fine to medium-grained, subrounded, fossiliferous (a coquina); fragments of limestone, white, sandy, phosphatic, fossili- ferous (macroshells and bryozoan remains)	51	509
Oligocene (Undifferentiated):		
Limestone: light-gray to cream at depth, nodular, somewhat saccharoidal, fossiliferous (molds, impressions, and frag- ments of megafossils, bryozoan remains, and some Fora- minifera)	10	519
Asterigerina sp., Siphonina advena, Discorbis subaraucana, Cibicides locatulus, Cibicides mississippiensis at 509-515.		
No samples	36	555
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone as above; interbedded dolomitic limestone, brown, saccharoidal	331	886
Gypsina globula at 555-582.		
No samples	30	916
In Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone as above; interbedded dolomitic limestone, dark- brown, saccharoidal	304	1,220
Dictyoconus sp. and abundant Miliolidae at 916-966.		
Summary:		
No complete	0 <b>F</b>	05

65	65
	123
386	509
10	519
<b>36</b>	555
331	886
30	916
304	1,220
	10 36 331

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone		825
	CAMDEN CO	OUNTY
Location: 0.75 to 1 mi. east of Tarboro on Whiteoak Road Owner: No. 1 Tarboro Elementary School Driller: Woodrow Sapp Drilled: October 1955	Well No.: GO Elev.: 14 <sup>1</sup>	3S 455
· · · · ·	Thickness (feet)	Depth (feet)
<ul> <li>Pliocene to Recent (Undifferentiated):</li> <li>Sand: fine-grained, finely disseminated phosphatic grainterbedded clay, dark-gray, silty, lignitic, micaceous</li> <li>Miocene (Undifferentiated):</li> <li>Clay: dark-green, sandy, phosphatic; interbedded sand, to coarse-grained phosphatic</li> </ul>	fine 55	55 200
Dolomitic limestone: light-brown, saccharoidal, sandy, p phatic; some sand as above	phos-	240
Clay: dark-green, sandy, phosphatic; interbedded dolor limestone as above		290
Clay: as above but sandier and somewhat indurated; i bedded limestone, white, dense (much calcitized), sa phosphatic, fossiliferous (macroshells)	undy,	310
Dolomitic limestone: brown, saccharoidal, sandy, phosph	atic 10	32 <b>0</b>
Limestone: white, dense (much calcitized), very sandy, p phatic, fossiliferous (molds, impressions, and fragmen macroshells); interbedded sand, fine to coarse-gra phosphatic	ts of ined,	430
Summary:		

Pliocene to Recent (undifferentiated)	55	55
Miocene (undifferentiated)	375	430

<sup>1</sup>Average elevation taken from State Highway map.

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to very coarse-grained		200
Sand: fine to coarse-grained		340
Limestone and sand		430

### CANDLER COUNTY

Location: Near Metter Owner: No. 1 Carl Daughtry Driller: Layne-Atlantic Company Drilled: 1955	Well No.: GGS 429 Elev.: 225
	Thickness Depth (feet) (feet)

# Miocene (Undifferentiated):

Sand: fine to coarse-grained, arkosic; some clay, bluish-gray to tan to red (mottled), sandy, limonitic	35	35
Clay: yellowish-green, sandy; interbedded sand, fine to coarse-grained, arkosic	60	95
Clay: dark-green to gray, sandy, phosphatic; interbedded sand, fine to coarse-grained, phosphatic	100	195
Light-brown to gray, phosphatic pebbles prominent at 95-105.		
Clay: dark-green, sandy, phosphatic; interbedded limestone,	35	230
gray, dense, sandy, fossiliferous (macroshells)	99	430
Indurated sand: gray, phosphatic, fossiliferous (a coquina)	10	240
Dolomitic limestone: light-brown, sandy, phosphatic	10	250
Sand: fine to coarse-grained, phosphatic	20	270
Clay: gray, sandy, phosphatic	20	290
Limestone: dark-gray, extremely dense (much calcitized),		
very sandy, phosphatic, fossiliferous (megafossils)	30	320
No samples	10	330
In Oligocene (Undifferentiated):		
Limestone: light-gray, dense, massive, crystalline, fossili-		
ferous (some macroshells, echinoid and bryozoan remains, and Foraminifera)	40	370

69

	Thickness (feet)	Depth (feet)
Rotalia mexicana var., Camerina sp., Quinqueloculina sp. at 330-340.		
Limestone: cream, rather soft and chalky, fossiliferous (as		
above)	65	435
No samples		455
<ul> <li>In Upper Eocene: Jackson Group: Ocala Limestone:</li> <li>Limestone: cream, soft, chalky, somewhat granular, fossiliferous (some echinoid and bryozoan remains, and Foraminifera)</li> <li>Robulus arcuato-striatus var., Eponides jacksonensis, Nonion planatus, Siphonina jacksonensis, Gypsina globula, Lepidocyclina sp. at 455-475.</li> </ul>	122	577

#### Summary:

Miocene (undifferentiated)	320	320
No samples	10	330
In Oligocene (undifferentiated)	105	435
No samples	20	455
In upper Eocene (Ocala limestone)	122	577

### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	 270
Limestone	 577

#### **Remarks**:

Top of Ocala limestone may be in "soft limestone" at 370-435. However, no fossils of upper Eocene age were recovered at this depth.

### CANDLER COUNTY

Location: Approximately 4 mi. northeast of Metter	Well No.: GGS 574
Owner: No. 1 J. O. Rocker	Elev.: 260
Driller: Turner Well Drilling Company	
Drilled: May 1959	

#### Miocene (Undifferentiated):

Clay: pale-greenish-gray with red to purple streaks (mot-		
tled), sandy, limonitic	43	43
Sand: fine to coarse-grained, subangular, arkosic	21	64

	Thickness (feet)	Depth (feet)
Clay: pale-yellowish-green to brownish-gray, blocky, sandy		144
Clay: as above but much sandier	61	205
Clay: dark-greenish-gray, somewhat indurated, tough, sandy, phosphatic, fossiliferous at depth; interbedded limestone, white, rather dense, sandy	120	325
Macroshells and phosphatic pebbles prominent at 246-265.		
Indurated sand, changing at depth to a sandy limestone: light-gray, fine-grained, dense, phosphatic, fossiliferous (a coquina with macroshells and Foraminifera)	20	345
Anahaiaa an at 228 240		

Archaias sp. at 328-349.

## Oligocene (Undifferentiated):

	assive, nodular, fossiliferous (chiefly n remains and some Foraminifera)	85	430
• •	talia mexicana var. at 349-369. Gypsina globula <sup>1</sup> , Operculinoides <sup>1</sup> sp.		

#### Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: cream, softer than above, somewhat granular and loosely consolidated, much calcitized, fossiliferous (some macroshells, bryozoan remains and Foraminifera)	41	471
Robulus limbosus var., Robulus arcuato-striatus, Eponides jacksonensis, Siphonina jacksonensis, Nonion planatus, Gypsina globula (common) at 451-471.		

#### Summary:

Miocene (undifferentiated)	345	345
Oligocene (undifferentiated)	85	430
Upper Eocene (Ocala limestone)	41	471

## Potential Water-Bearing Zones:

Limestone		471
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Reworked(?) fossil of middle Eocene age.

### CANDLER COUNTY

Location: Approximately 9 mi. northwest of Metter	Well No.: GGS 581
Owner: No. 1 J. A. Durdon	Elev.: 275
Operator: Turner Well Drilling Company	
Drilled: August 1959	

			Thickness (feet)	Depth (feet)

#### Miocene (Undifferentiated):

Clay: yellowish-green to purple (mottled), very sandy, limo- nitic; sand, coarse-grained, subrounded, arkosic	22	22
Sand: coarse-grained, subrounded, arkosic	20	42
Clay: pale-yellowish-green to greenish-gray but dark olive- green at depth, blocky, sandy	101	143
Sand: coarse-grained, subrounded, arkosic	20	163
Sand: fine-grained, subrounded; interbedded clay, yellowish- green, rather tough, sandy	21	184
Clay: greenish-gray to pale-yellowish-green at depth, sandy; interbedded limestone, cream, sandy, rather dense, fossili- ferous at depth (macroshells); sand, fine-grained, sub- rounded, light-gray, rounded phosphatic pebbles.	82	266
Limestone: as above; interbedded siltstone, light-brown to brownish-gray, very dense, highly siliceous; indurated sand, fine to medium-grained, subrounded, rather dense, crystal- line, fossiliferous (some macroshells)	30	296

#### In Oligocene (Undifferentiated):

Limestone: cream, much leached, rather soft, loosely cemented,		
cherty at depth, fossiliferous (echinoid and bryozoan re-		
mains, some Ostracods and Foraminifera)	93	389

Rotalia mexicana var. at 296-307.

Quinqueloculina sp., Nonionella oligocenica, Reussella oligocenica, Discorbis cf. D. tentoria, Nonion advena, Rotalia mexicana var., Cibicides lobatulus, Cibicides americanus var. at 307-327.

WELL LOGS OF THE COASTAL PLAIN	OF	GEORGIA
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	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, granular (in texture), rather loosely con- solidated <sup>1</sup> , fossiliferous (abundant bryozoan remains <sup>2</sup> and rare Foraminifera)		410
Operculinoides sp. (rare) at 389-410.		
Limestone: cream, firmly consolidated (as compared to lime- stone above), fossiliferous (abundant bryozoan remains)	20	430

## Summary:

Miocene (undifferentiated)	<b>29</b> 6	296
In Oligocene (undifferentiated)	93	389
Upper Eocene (Ocala limestone)	41	430

## **Potential Water-Bearing Zones:**

Sand: coarse-grained	20	163
Limestone: cream, rather porous	20	430

200000000000000000000000000000000000000	Vell No.: Slev.: 310	GGS 582
Operator: Turner Well Drilling Company		
Drilled: August 1959	Thickn (feet	
No samples		2 22
In Miocene (Undifferentiated):		
Clay: yellowish to olive-green to greenish-gray, somew blocky, sandy, cherty and phosphatic at depth; interbed sand, fine to coarse-grained, subangular, arkosic, phospha	ded	•
at depth		6 368
Black, polished phosphatic pebbles prominent at 245-266	6.	
Marl: dark-gray, silty, micaceous, fossiliferous (macroshel	lls) 21	1 389
<sup>1</sup> Representative of inner lagoon (nost harrier reef) denosits		

<sup>1</sup>Representative of inner lagoon (post barrier reef) deposits. <sup>2</sup>Consisting of approximately 98 percent bryozoan remains. 73

CANDLER COUNTY

	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: light-gray to cream, nodular, rather massive, some- what sandy, fossiliferous (macroshells, some bryozoan re- mains, and Foraminifera)	41	430
Pyrgo sp., Eponides sp., Asterigerina subacuta at 389-403.		
Casts and molds of megafossils, particularly of Gastropods prominent at 403-410.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, soft, granular, fossiliferous (bryozoan re- mains and abundant "larger Foraminifera")	20	450
Gypsina globula, Reussella eocena, Eponides jacksonensis, Lepidocyclina sp. abundant at 430-450.		

#### Summary:

No samples	22	22
	367	389
Oligocene (undifferentiated)	41	430
Upper Eocene (Ocala limestone)	20	450

## Potential Water-Bearing Zones:

Limestone	61	450
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### CHARLTON COUNTY

Location: 21 mi. west of Folkston on Jones Island,	Well No.: GGS 93
Okefenokee Swamp	Elev.: 120
Owner: No. 1 U. S. Biological Survey	
Driller: Virginia Supply and Well Company	
Drilled: November 1939	
	Thickness Depth (feet) (feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine-grained, finely disseminated phosphatic grains; interbedded clay, dark-gray, sandy, lignitic, micaceous	30	30
Limestone: dark-gray, somewhat argillaceous	9	39
Clay: light-gray, very sandy, phosphatic	11	50

	Thickness (feet)	Depth (feet)
Limestone: light-gray, dense (much calcitized), very sandy, fossiliferous (casts and impressions of megafossils)	10	60
Sand: fine-grained, somewhat argillaceous, sparsely phosphati	c 22	82
<ul> <li>Miocene (Undifferentiated):</li> <li>Clay: dark-green, blocky, sandy, phosphatic; interbedded sand, fine to coarse-grained, phosphatic; dolomitic limestone, light-brown, sandy, phosphatic</li> <li>Dolomitic limestone prominent at 139-155 and 220-228.</li> <li>Sand prominent at 263-270.</li> </ul>	188	270

### Summary:

Pliocene to Recent (undifferentiated)	82	82
Miocene (undifferentiated)	188	270

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	 7	270

	CHAR	LTON CO	UNTY
<ul> <li>Location: 1.25 mi. southwest of Atlantic Coast Line R.R. depot in Folkston</li> <li>Owner: No. 1 State Prison Camp (Folkston)</li> <li>Driller: Gray Well and Pump Corporation</li> <li>Drilled: January 1941</li> </ul>	Well N Elev.:	Io.: GGS ∶ 75	185
		Thickness (feet)	Depth (feet)
No samples		90	90
In Pliocene to Recent (Undifferentiated):			
Limestone: gray, dense (highly calcitized), saccha sandy, sparsely but finely phosphatic, fossiliferous and impressions of megafossils)	(molds	10	100
Miocene (Undifferentiated):			
Sand: fine to coarse-grained, abundantly phosphatic dark-green, somewhat indurated, fossiliferous (some minifera)	Fora-		125
Rotalia beccarii var. at 118.			

	Thickness (feet)	Depth (feet)
Clay: dark-green, partially indurated, fossiliferous (macro- shells, Ostracods, and Foraminifera)	110	235
Sand: fine to coarse-grained, abundantly phosphatic	23	258
Clay: dark-green, silty, cherty		286
Dolomitic limestone: light-brown, dense (highly calcitized),		
sandy, coarsely phosphatic	21	307
Sand: fine to coarse-grained, abundantly phosphatic		397
Clay: green, sandy, phosphatic, sandier at depth	48	455
Limestone; white, sandy at 435-445.		
No samples	72	517

#### In Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: cream to light-gray, dense (much calcitized), fos-		
siliferous (fragments of bryozoan remains, macroshells, Os-		
tracods, and Foraminifera)	37	554
Operculinoides cf. O. floridensis at 517-526.		

#### Summary:

No samples	90	90
In Pliocene to Recent (undifferentiated	<b>10</b>	100
Miocene (undifferentiated)	345	445
No samples	72	517
In upper Eocene (Ocala limestone)	37	554

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained, phosphatic	90	397
Limestone	<b>34</b>	554

## CHARLTON COUNTY

Location: In Folkston	Well No.: GGS 453
Owner: No. 1 Folkston Elementary and High School	Elev.: 80 <sup>1</sup>
Driller: M. M. Gray	
Drilled: 1955	
	Thickness Depth (feet) (feet)

#### Pliocene to Recent (Undifferentiated):

<sup>1</sup>Average elevation taken from State Highway map.

WELL L	OGS OF	THE	COASTAL	Plain	$\mathbf{OF}$	GEORGIA
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	Thickness (feet)	Depth (feet)
Limestone: light-gray to brown, dense, saccharoidal, sandy; interbedded clay, dark-green, somewhat indurated, fossilifer- ous (some Ostracods and Foraminifera)	60	120
Rotalia beccarii var. at 60-70.		
Miocene (Undifferentiated):		
Clay: light-gray to pale-green, sandy, sparsely phosphatic	40	160
Sand: fine to coarse-grained; dolomitic limestone, light-brown, saccharoidal (much calcitized), sandy, coarsely phosphatic	150	310
Clay: dark-green, sandy	30	340
Dolomitic limestone: light-brown, saccharoidal, sandy, coarse- ly phosphatic, cherty	40	380
Sand: fine to coarse-grained	15	395
Clay: dark-green, silty; siltstone, light-brown, indurated, sandy, phosphatic	25	420
Dolomitic limestone: light-brown, saccharoidal, very sandy, coarsely phosphatic	50	470
Clay: dark-green, sandy, cherty	30	500
Sand: fine to coarse-grained, phosphatic		520
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, dense (much calcitized), sandy (at top of section), fossiliferous (bryozoan remains, Ostracods, and Foraminifera)	130	650
Operculinoides sp. at 520-530.		
Summary:		
Pliocene to Recent (undifferentiated)		120
Miocene (undifferentiated)		520
Upper Eocene (Ocala limestone)		650
Potential Water-Bearing Zones:		
Sand: fine to coorse avained	90	590

Sand: fine to coarse-grained	<b>20</b>	520
Limestone	130	650

### CHATHAM COUNTY

	Vell No.: GGS Elev.: 14	1
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, subangular, cherty, somewhat micaceo	ous 32	32
Sand: fine to coarse-grained, subangular, sparsely phospha fossiliferous (a few fragments of molluscan shells)	-	90
Sand: coarse-grained, subangular to subrounded, abundar phosphatic, fossiliferous (molluscan shells)		103
Miocene (Undifferentiated):		
Clay: pale-brownish-gray, blocky, sandy, phosphatic		158
Limestone: white, very sandy, phosphatic, fossiliferous (mo of molluscan shells)		180
Oligocene (Undifferentiated):		
Limestone: light gray, sandy, somewhat nodular, spars phosphatic, fossiliferous (molds of molluscan shells Foraminifera)	and	220
Quinqueloculina sp., Lepidocyclina sp., Gypsina globula 180-220.	ı at	
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, crystalline (in texture), much calciti and fossiliferous (abundant bryozoan remains and Foram fera)	ini-	415
Operculinoides floridensis, Asterocyclina nassauensis, Ro lus alato-limbatus, Planularia sp., Saracenaria sp., Sip nina jacksonensis at 220-250.		
Eponides cocoaensis, Asterocyclina nassauensis, Oper linoides floridensis, Planulina cocoaensis, Pseudophragm flintensis, Gypsina vesicularis, Nodosaria latejugata v Nonion cf. N. planatus at 250-380.	vina	

	Thickness (feet)	Depth (feet)
Limestone: cream, granular (in texture), much calcitized, fos- siliferous (Foraminifera)	195	610
Camerina striatoreticulata at 430-460.		
Operculina mariannensis at 490-520.		
Glauconite-impregnated Foraminifera prominent at 580- 610.		
Lepidocyclina (Polylepidina) antillea? at 580-610.		

## Summary:

Pliocene to Recent (undifferentiated)	103	103
Miocene (undifferentiated)	77	180
Oligocene (undifferentiated)	40	220
Upper Eocene (Ocala limestone)	390	610

## CHATHAM COUNTY

Location: 2.4 mi. east of City Hall, Savannah Owner: No. 1 Southeastern Shipyards Driller: Layne-Atlantic Company Drilled: June 1941	Well No.: GGS 35 Elev.: 9	
	Thickness (feet)	Depth (feet)
No samples		20
In Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, angular, arkosic; clay, o gray, silty, lignitic, micaceous		10
Sand: fine to medium-grained, angular, arkosic		60
Sand: as above, but coarse-grained, subrounded	12	72
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic (at depth)		205
No samples		208
Limestone: light-gray, dense, sandy, phosphatic; dolo limestone, light-brown, saccharoidal, sandy, phosphatic		208
No samples		228

	Thickness (feet)	Depth (feet)
In Oligocene (Undifferentiated):		
Limestone: light-gray, dense (much calcitized), nodular, fos- siliferous (some echinoid and bryozoan remains and Fora- siliferous (bryozoan remains and Foraminifera)	?	300
Quinqueloculina sp., Elphidium sp. at 228. Textularia sp., Nonionella hantkeni var. at 248.		
No samples	52	300
Limestone: cream, crystalline (much calcitized), nodular, fos- siliferous (bryozoan remains and frequent Foraminifera)	?	300
Quinqueloculina sp., Discorbis? sp., Rotalia sp. at 300.		
No samples		320
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream to light-gray, massive, saccharoidal (highly calcitized), nodular, fossiliferous (abundant bryozoan re- mains, echinoid spines, and some Foraminifera)		355
Operculinoides sp. at 320. Robulus alato-limbatus at 355.		
No samples	17	372
Limestone: white, crystalline (in texture), much calcitized, fossiliferous (abundant bryozoan remains and some Fora- minifera)	30	402
Asterocyclina nassauensis at 372.		
No samples		525
Limestone: cream, granular, sparsely glauconitic, fossiliferous ("larger Foraminifera")	121	646
Camerina striatoreticulata common at 525.		

## Summary:

No samples	<b>20</b>	20
In Pliocene to Recent (undifferentiated)	52	72
Miocene (undifferentiated)	156	228
No samples	12	240
In Oligocene (undifferentiated)	60	300
No samples	<b>20</b>	320
In upper Eccene (Ocala limestone)	326	646

	(leet)	(feet)
Potential Water-Bearing Zones:		
Limestone	406	646

#### Remarks:

Sample intervals too large to permit satisfactory picking of formational tops.

#### CHATHAM COUNTY

Thickness

Location: 2 mi. east of City Hall, near south bank of Well	No.: GGS	61
Savannah River, in Savannah Elev.	: 6	
Owner: No. 1 Standard Oil Company		
Driller: Layne-Atlantic Company		
Drilled: August 1940		
	Thickness (feet)	Depth (feet)

#### Pliocene to Recent (Undifferentiated):

Sand: fine to coarse-grained, angular, arkosic, finely dissemi- nated phosphatic grains; interbedded clay, dark-gray, silty, lignitic, micaceous, fossiliferous (macroshells at certain		
levels)	60	60
Sand: coarse-grained, arkosic, somewhat phosphatic	10	70
Miocene (Undifferentiated):		
Clay: dark-green, somewhat granular (in texture), sandy, phosphatic (at depth)	30	100
Reddish-brown phosphatic fragments prominent at 100.		
Clay: as above; interbedded dolomitic limestone, light-brown, saccharoidal, sandy, phosphatic; limestone, light-gray to white, dense, saccharoidal, very sandy, phosphatic, fossil-	1 / 2	0.45
iferous at depth (casts and impressions of megafossils)	145	<b>245</b>
Dolomitic limestone prominent at 140.		
No samples	<b>32</b>	277
In Oligocene (Undifferentiated):		

Limestone: cream, nodular (much calcitized), cherty, fossil-

Depth

	Thickness (feet)	Depth (feet)
iferous (casts and molds of Gastropods, some echinoid and bryozoan remains, and Foraminifera).	?	277
Quinqueloculina sp., Pyrgo sp. at 277.		
No samples	13	290
Limestone: light-gray, massive, crystalline (recrystallized), fossiliferous (some bryozoan remains, Ostracods, and Fora-		
minifera)	20	310
No samples		325
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, somewhat calcitized, crystalline, fossilifer- ous (abundant bryozoan remains and some Foraminifera)	?	325
Operculinoides floridensis, Asterocyclina nassauensis, Argy- rotheca sp. at 325.		
Limestone: as above		400
No samples		420
Limestone: cream, highly calcitized, granular, fossiliferous ("larger Foraminifera" at certain levels)	230	650
Camerina striatoreticulata at 480.		
Operculina mariannensis at 580.		

#### Summary:

Pliocene to Recent (undifferentiated)	70	70
Miocene (undifferentiated)	175	245
No samples	32	277
In Oligocene (undifferentiated)	33	310
No samples	15	325
In upper Eocene (Ocala limestone)	325	650

## **Potential Water-Bearing Zones:**

	373 (	650
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#### Remarks:

Well plagued with sample gaps, hence impossible to place formational tops with accuracy.

#### CHATHAM COUNTY

of Travis Air Force Base, Port Wentworth Owner: No. 1 Cherokee Hill	Well Elev.	No.: GGS : 22	62
Drilled: 1920		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine-grained; inclusions of kaolin, white, sandy, m			42
Miocene (Undifferentiated):			
Clay: dark-green, sandy, phosphatic, gypsiferous at cer levels	tain	118	160
Brown to black, polished, phosphatic pebbles abundan 120-130.	t at		
Dolomitic limestone: light-brown, saccharoidal, sandy; s clay, dark-green, sandy, phosphatic		40	200
Clay, as above	···- ·	21	221
No samples			280
In Oligocene (Undifferentiated):			
Limestone: light-gray, rather dense, nodular (calcitiz somewhat sandy, fossiliferous (echinoid and bryozoan mains, and some Foraminifera)	re-	30	310
Discocyclina <sup>1</sup> sp., Dictyoconus <sup>1</sup> sp., Textularia sp., Non ella hantkeni var., Discorbis cf. D. tentoria, Cibicides l tulus, Nonion advena, Reussella oligocenica at 280-290. Rotalia mexicana var. at 300-310.			
Limestone: cream, massive, saccharoidal at depth, fossili ous (fragments, casts and molds of Gastropods, echinoid bryozoan remains, and Foraminifera)	and		360
Gypsina globula <sup>1</sup> , Asterocyclina <sup>1</sup> sp., Pyrgo sp., Rot mexicana var., Cibicides lobatulus at 310-320.	talia		
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: light-gray, dense, massive (much calcitized), siliferous (macroshells, abundant bryozoan remains, some Foraminifera)	and	30	390
Asterocyclina sp., Operculinoides sp., Gypsina globulo 370-380.	ı at		

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

	Thickness (feet)	Depth (feet)
Limestone: white, crystalline (much calcitized), massive, fos- siliferous (macroshells, abundant bryozoan remains, and Foraminifera)	50	440
Asterocyclina nassauensis at 390-400.		
Limestone: light-gray, saccharoidal, crystalline (highly calci- tized), coarsely glauconitic, fossiliferous (abundant echinoid and bryozoan remains, and some Foraminifera)	55	495
No samples	5	500
Limestone: cream, granular, sandy at depth, fossiliferous (abundant echinoid and bryozoan remains and abundant "larger Foraminifera")	170	670
Camerina cf. C. striatoreticulata at 525.		
No samples	40	710
In Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: light-gray, massive, somewhat saccharoidal, coarsely glauconitic, somewhat fossiliferous (echinoid and bryozoan remains, and some Foraminifera)	40	750
Asterocyclina monticellensis at 730.		
No samples	30	780
Limestone: white, massive (much calcitized), cherty, fossili- ferous (macroshells, bryozoan remains, and some Foramini- fera)	80	860
,	80	800
<i>Operculinoides</i> sp. at 780.		
No samples	30	890
Limestone: cream, granular, cherty	60	950
Brown chert abundant at 890.		
No samples	60	1,010
In Tallahatta Formation:		
Limestone: as above, but coarsely glauconitic and fossiliferous (abundant Foraminifera)	260	1,270
Cibicides blanpiedi, Cibicides tallahattensis at 1010.		
No samples	90	1,360

Well	LOGS	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA

	Thickness (feet)	Depth (feet)
In Lower Eocene and Paleocene (Undifferentiated):		
Sand: fine to medium-grained, abundantly glauconitic	?	1,360
No samples	30	1,390
Marl: light-gray, somewhat indurated, glauconitic, fossilifer- ous (Ostracods and abundant Foraminifera)	20	1,410
Spiroplectammina wilcoxensis, Vaginula longiforma, Boli- vina midwayensis, Bulimina quadrata, Siphonina wilcoxen- sis, Siphonina prima, Gyroidina aequilateralis, Chilostomel- loides eocenica, Discorbis cf. D. midwayensis, Anomalina sp. at 1390.		
No samples	20	1,430
Limestone: dark-gray, crystalline, very dense, somewhat argil- laceous, coarsely glauconitic	?	1,430
No samples	110	1,540
Marl: light-gray to dark-brown at depth, somewhat indurated, glauconitic, pyritiferous, fossiliferous (Ostracods and Fora- minifera)	50	1,590
Polymorphina cushmani at 1590.		
No samples		1,610
In Upper Cretaceous (Undifferentiated):		
Marl: dark-bluish-gray, silty, pyritiferous, micaceous; inter- bedded sand, fine to medium-grained, micaceous, pyritifer- ous, fossiliferous (Ostracods and Foraminifera)	520	2,130

Dorothia bulletta, Bulimina pupoides, Anomalina sp. at 1650.

Clavulinoides trilatera at 1690.

Gaudryina rudita, Loxostoma plaitum, Bulimina pupoides, Globotruncana arca, Cibicides harperi at 1710.

Gaudryina rudita, Anomalina henbesti at 2070.

#### Summary:

Pliocene to Recent (undifferentiated)	42	<b>42</b>
Miocene (undifferentiated)	179	221
No samples	59	280
In Oligocene (undifferentiated)	80	360
Upper Eocene (Ocala limestone)	310	670
No samples	40	710
In middle Eocene (Lisbon formation)	<b>240</b>	950

85

	Thickness (feet)	Depth (feet)
No samples	60	1,010
In middle Eocene (Tallahatta formation)		1,270
No samples	90	1,360
In lower Eocene and Paleocene (undifferentiated)	230	1,590
No samples	20	1,610
In Upper Cretaceous (undifferentiated)	520	2,130

## **Potential Water-Bearing Zones:**

Limestone		1,010
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	CHATHAM COUNTY
Location: Abercorn and 59th Street, Savannah Owner: City of Savannah Driller: Layne-Atlantic Company Drilled: May 1941	Well No.: GGS 80 Elev.: 18
	Thickness Depth (feet) (feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine-grained to coarser-grained at depth; interbedded clay, dark-gray to black, somewhat fissile, silty, lignitic, mi-		
caceous, fossiliferous (macroshells)	60	60
Clay: gray to dark-green, sandy, somewhat phosphatic	20	80
Sand: coarse-grained, rounded, arkosic; some clay, as above	2	82
Sand: as above; fragments of dolomitic limestone, light-brown, saccharoidal, sandy, phosphatic	2	84
No samples	31	115
In Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic	115	230
Dolomitic limestone: light-brown, saccharoidal, sandy, fossil- iferous (casts and impressions of megafossils); interbedded limestone, light-gray, dense (much calcitized), somewhat		
nodular, sandy, phosphatic	20	250
No samples	20	270

WELL LOGS OF THE COASTAL PLAIN OF GEORGI	WELL	LOGS	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA
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Depth (feet)

Thickness (feet)

iferous (megafos	rather massive (much calcitized), fossil- ssils and some Foraminifera); some lime-
$globula^1$ at 270.	ı var., Nonionella hantkeni var., Gypsina
Dictyoconus <sup>1</sup> sp.	
No samples	
n Upper Eocene: Jac	ckson Group: Ocala Limestone:
crystalline, fossil	rray to white, dense (much calcitized), iferous (megafossils, echinoid and bryozoan raminifera)
Operculinoides fl	oridensis, Asterocyclina sp. at 386.
No samples	· · · · · · · · · · · · · · · · · · ·
Limestone: cream,	granular, fossiliferous (Foraminifera)
Asterocyclina na 565.	ssauensis, Pseudophragmina flintensis at
Camerina striato	reticulata, Operculina mariannensis at 640.
Limestone: as abov	e, but coarsely glauconitic
	Summary:
	undifferentiated)
	rentiated)
	erentiated)

#### **Potential Water-Bearing Zones:**

In upper Eocene (Ocala limestone)

Limestone	430	700
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Reworked(?) fossil of middle Eocene age.

### CHATHAM COUNTY

Location: On White Bluff Road, 700 ft. west and 0.3 mi.	Well No.: GGS 125
north of Buckhalter Road, Savannah	Elev.: 21
Owner: No. 1 J. M. Breckenridge	
Drillor, Lavna Atlantia Company	

· · · · · · · · · · · · · · · · · · ·	Thickness (feet)	Deptl (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, arkosic, finely disseminated phosphatic grains; interbedded clay, dark-gray, silty, lig- nitic, micaceous		6(
No samples		80
Sand: coarse-grained, arkosic, subrounded	?	80
No samples		10
In Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic	120	22
Brown to black, phosphatic pebbles abundant at 220.		
No samples	20	24
		25
Clay: as above; some dolomitic limestone, light-brown, saccha- roidal, sandy	10	

(echinoid and bryozoan remains and Foraminifera)	70	345
Pyrgo sp. at 270.		
Rotalia mexicana var., Quinqueloculina sp. at 295.		
Operculinoides sp., Nonionella hantkeni var. at 320.		
No samples	30	375

## In Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: light-gray to white at depth, much calcitized, crys- talline, fossiliferous (abundant bryozoan remains, Ostra- cods, and some Foraminifera)	145	520 <sub>4</sub>
Operculinoides floridensis at 375.		
Pseudophragmina flintensis, Gypsina globula, Asterocyclina sp. at 400.		

	Thickness (feet)	Depth (feet)
No samples	20	540
Limestone: cream, granular (highly calcitized), sparsely glau- conitic, fossiliferous (abundant bryozoan remains and "larg- er Foraminifera," many of which are impregnated with glauconite)	60	600
Operculina mariannensis, Camerina striatoreticulata at <b>540.</b>		

#### Summary:

Pliocene to Recent (undifferentiated)	80	80
No samples	20	100
In Miocene (undifferentiated)	153	253
No samples	22	275
In Oligocene (undifferentiated)	70	345
No samples	30	375
In upper Eocene (Ocala limestone)	225	600

### **Potential Water-Bearing Zones:**

Limestone 3	325 - 6	500
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#### Remarks:

Sample intervals too large to permit picking of satisfactory formational tops.

#### CHATHAM COUNTY

Location: South bank of Savannah River, in Savannah	Well No.: GGS 377
Owner: No. 1 American Cyanamid Company	Elev.: 15
Driller: M. M. Gray Drilling Company	7
Drilled: May 1954	

## Pliocene to Recent (Undifferentiated):

Clay: light to dark-gray, silty, lignitic, finely disseminated phosphatic grains	40	40
Sand: fine to coarse-grained, arkosic, subangular	10	50
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic	84	134
Clay: as above; interbedded dolomitic limestone, light-brown, saccharoidal, sandy, phosphatic	32	166
Reddish-brown phosphatic pellets abundant at 134-140.		

	Thickness (feet)	Depth (feet)
Limestone: light-gray, rather dense, sandy, phosphatic, fossil- iferous (casts and molds of megafossils)		180
Oligocene (Undifferentiated):		
Limestone: light-gray, chalky, soft, fossiliferous (echinoid and bryozoan remains, Ostracods, and Foraminifera)		235
Rotalia mexicana var. at 176-184. Nonionella hantkeni var., Robulus sp., Textularia sp., Gyp- sina globula <sup>1</sup> at 195-205.		
Limestone: cream, granular (in texture), much calcitized, fos- siliferous (Gastropods, some echinoid and bryozoan remains, and Foraminifera)	42	277
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray to white, coarsely glauconitic at depth, extremely dense (highly calcitized), fossiliferous (abundant echinoid and bryozoan remains, some Ostracods and Fora- minifera)	158	435
Operculinoides cf. O. floridensis at 275-285.		
Robulus cultratus, Lingulina sp., Planularia sp., Nodosaria latejugata var. carolinensis at 285-295.		
Asterocyclina nassauensis at 315-325.		
Limestone: cream, granular (much calcitized), coarsely but sparsely glauconitic, cherty (at depth), fossiliferous (abun- dant "larger Foraminifera," some of which are impregnated with glauconite)	215	650
Asterocyclina sp., Lepidocyclina (Polylepidina) antillea $^1$ at 480-490.		
Brown chert at 550-560.		

## Summary:

Pliocene to Recent (undifferentiated)	50	50
Miocene (undifferentiated)	130	180
Oligocene (undifferentiated)	<b>97</b>	277
Upper Eocene (Ocala limestone)	373	650

## Potential Water-Bearing Zones:

Limestone	373	650

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

## CHATHAM COUNTY

of crossroads (Waltz Drive and Toussaint Avenue), in Ele Savannah Owner: City of Savannah	ll No.: GGS w.: 25	379
Driller: Layne-Atlantic Company Drilled: April 1954		
Drined. April 1994	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, finely disseminated phosphati grains; interbedded clay, dark-brown, silty, lignitic, mice ceous	1-	80
In Miocene (Undifferentiated):		
Clay: dark-green, silty, abundantly phosphatic at depth, finel disseminated flakes of mica		200
Dolomitic limestone: light-brown, saccharoidal, sandy, phosphatic; limestone, light-gray, dense (much calcitized), sandy phosphatic, fossiliferous (molds and impressions of mega fossils)	y, 1-	235
In Oligocene (Undifferentiated):		
Limestone: light-gray, dense (much calcitized), nodular, for siliferous (echinoid and bryozoan remains, Ostracods, an Foraminifera)	d	343
Rotalia mexicana var., Nonion advena, Cibicides americanı var., Cibicides lobatulus at 221-250.	เร	
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray to white at depth, crystalline (muc calcitized), somewhat nodular, massive, fossiliferous (mold and casts of megafossils, abundant bryozoan remains, an some Foraminifera)	ls Id	434
Operculinoides cf. O. floridensis, Gypsina vesicularis, Node saria latejugata var., Argyrotheca sp. at 313-373.	)-	
Asterocyclina nassauensis, Gypsina globula, Siphonin jacksonensis at 373-434.	a	
Limestone: cream, somewhat crystalline (calcitized), fossi iferous (abundant echinoid spines, bryozoan remains, an Foraminifera)	ıd	790
Camerina striatoreticulata, Operculina mariannensis, Lep docyclina (Polylepidina) antillea <sup>1</sup> at 524-615.	<i>i</i> -	
1 Powerlad (2) foreil of middle The me and		

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

	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: cream, crystalline, granular (highly calcitized), coarsely glauconitic, fossiliferous (abundant bryozoan re- mains, and some Foraminifera)	160	950
Cancris sp., Gyroidina soldanii var., Siphonina claibornen- sis, Cibicides mississippiensis, Cibicides pippeni var. at 790-800.		
Asterocyclina monticellensis, Cibicides pseudoungerianus var. lisbonensis at 800-810.		
Cibicides westi at 830-840.		
Limestone: cream, crystalline, granular (highly calcitized), cherty	50	1,000
Brown chert abundant at 950-960.		

#### Summary:

Pliocene to Recent (undifferentiated)	80	80
In Miocene (undifferentiated)	155	235
In Oligocene (undifferentiated)	108	343
In upper Eocene (Ocala limestone)	447	790
In middle Eocene (Claiborne group, undifferentiated)	210	1,000

#### **Potential Water-Bearing Zones:**

Limestone	515	750
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### Remarks:

Sample intervals too large to permit accurate picking of formational tops.

#### CHATHAM COUNTY

	Well No.: GGS Elev.: 14	380
Savannah Owner: No. 1 T. T. Dunn Driller: Layne-Atlantic Company		
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, finely disseminated phosphatic grain	ns 5	5

Sand: fine to medium-grained, arkosic\_\_\_\_\_\_ 10 15

	Thickness (feet)	Depth (feet)
Clay: dark-gray, silty, lignitic, micaceous, fossiliferous (mac- roshells); sand, as above	20	35
Sand: fine to coarse-grained, subrounded	15	50
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic, finely disseminated flakes of mica	108	158
Reddish-brown phosphatic fragments prominent at 86-96.		
Dolomitic limestone: light-brown, saccharoidal, very sandy, phosphatic	10	168
Clay: dark-green, silty, phosphatic, blocky	31	199
Limestone: light-gray, somewhat argillaceous, very sandy, phosphatic, fossiliferous (casts and molds of megafossils, Ostracods, and Foraminifera)	20	219
Nonion pizarrensis, Rotalia beccarii var., Cibicides ameri- canus at 199-209.		
Elphidium discoidale, Discorbis subaraucana, Nonion advena,		
Cibicides concentricus at 209-219.		

## Oligocene (Undifferentiated):

Limestone: cream, somewhat crystalline (in texture), nodular (calcitized), fossiliferous (echinoid and bryozoan remains, Ostracods, and Foraminifera)	31	250
Rotalia mexicana var., Pyrgo sp., Quinqueloculina sp. at 219-230.		
Lepidocyclina (Polylepidina) antillea <sup>1</sup> , Gypsina globula <sup>1</sup> , Rotalia mexicana var., Nonionella hantkeni var., Cibicides lobatulus, Cibicides americanus var. at 230-240.		
Limestone: yellow, saccharoidal (highly calcitized), fossil- iferous (Gastropods, Ostracods, and Foraminifera)	60	310
$Dictyoconus^1$ sp. at 250-260.		

## Summary:

Pliocene to Recent (undifferentiated)	50	50
Miocene (undifferentiated)	169	219
Oligocene (undifferentiated)	91	310

## Potential Water-Bearing Zones:

Limestone	91	310
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<sup>3</sup>Reworked(?) fossil of middle Eocene age.

## CHATHAM COUNTY

	ULU		UNII
Location: Fort Pulaski, Cockspur Island Owner: No. 1 USGS Test Hole (Observation Well) Driller: M. M. Gray Drilling Company Drilled: May 1954	Well Elev.	No.: GGS : 8	381
		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Clay: dark-gray, somewhat indurated, silty, carbonac micaceous, fossiliferous (macroshells at certain lev some sand, fine to medium-grained, subangular, arkos	els);	. 59	59
Miocene (Undifferentiated):			
Clay: dark-green, sandy, phosphatic; interbedded dolo limestone at depth, light-brown, saccharoidal, sandy			112
Brownish-red phosphatic pebbles common at 79-82.			
Dolomitic limestone prominent at 82-92.			
Limestone: light-gray to white, saccharoidal, sandy, p phatic, fossiliferous (fragments, casts and molds of me shells)		8	120
Oligocene (Undifferentiated):			
Limestone: light-gray, somewhat crystalline, nodular, n calcitized and massive, fossiliferous (bryozoan remains some Foraminifera)	and	12	132
Rotalia mexicana var., Alabamina mississippiensis, Sa nina advena, Cibicides lobatulus, Cibicides mississippi at 115-122.	•	12	
Limestone: cream, somewhat nodular, rather massive, sa fossiliferous (casts and molds of Gastropods and Foraminifera)	some	88	220
<i>Pyrgo</i> sp. at 132-142.			
Quinqueloculina sp., Coskinolina <sup>1</sup> sp. at 142-152.			
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: white, much calcitized, crystalline, somewhat charoidal, abundantly fossiliferous (macroshells, abun bryozoan remains and Foraminifera)	dant	85	305
Asterocyclina nassauensis at 225-230.			

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

	Thickness (feet)	Depth (feet)
Limestone: light-gray, crystalline, saccharoidal, coarsely but sparsely glauconitic, fossiliferous (abundant bryozoan and echinoid remains and some Foraminifera)	40	345
Limestone: cream, somewhat calcitized and crystalline, rela- tively soft and porous, granular, somewhat loosely consoli- dated, sparsely glauconitic, fossiliferous at certain levels (bryozoan remains and Foraminifera)	281	626
Camerina striatoreticulata at 395-401.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: as above, but more massive, calcitized, somewhat sandy, fossiliferous (macroshells and Foraminifera at cer- tain levels)	79	705
Limestone: white, somewhat crystalline, massive, coarsely but sparsely glauconitic, fossiliferous (macroshells and frequent bryozoan remains)	5	710
Limestone: cream, calcitized and granular, somewhat loosely consolidated, sparsely glauconitic, fossiliferous (macroshells and Foraminifera)	25	735
Cancris sp., Gyroidina soldanii var., Cibicides pseudounger- ianus var. lisbonensis at 730-735.		
Marl: yellowish-green becoming cream and granular at depth, fossiliferous (an abundant microfauna); interbedded sand, fine to medium-grained, subangular	215	950
Textularia dibollensis, Textularia a Spiroplectammina mississippiensis var., Robulus alato-limbatus, Discorbis assulata, Nonion planatus, Nonion inexcavatus, Lagena acuticosta, Sigmoidella plummerae, Marginulina cocoaensis, Gyroidina soldanii var., Angulogerina vicksburgensis, Boliv- ina broussardi, Buliminella robertsi, Cibicides danvillensis, Cibicides cf. C. westi, Cibicides americanus var. antiquus, Cibicides lobatulus at 735-740.		
Cibicides westi, Cibicides pseudoungerianus var. lisbonensis, Lepidocyclina sp. at 740-766. Discorbis inornatus at 827-868.		
Tallahatta Formation:		
Lithology as above but much more glauconitic	144	1,094
Cibicides blanpiedi at 950.		
Cancris sp., Eponides mexicanus at 986.		

Lower Eocene: Wilcox Group (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: light-brown to cream, calcitized, more calcitized and crystalline at depth, granular, somewhat loosely con- solidated, glauconitic (abundantly so at certain levels), cherty, pyritiferous, fossiliferous (echinoid and bryozoan remains, Ostracods and Foraminifera)	320	1,414
Textularia sp., Robulus sp., Eponides cf. E. dorfi, Valvulin- eria scrobiculata, Cibicides blanpiedi at 1094-1114. Operculinoides sp., Pseudophragmina sp. at 1156. Paleocene: Midway Group: Clayton Formation:		
Marl: dark-brownish-gray, somewhat indurated, laminated, silty, glauconitic, abundantly fossiliferous (Ostracods and abundant Foraminifera)	21	1,435
Spiroplectammina semicomplanata, Gaudryina pyramidata, Nodosaria affinis, Pseudoglandulina manifesta, Valvulineria umbilicatula, Gryoidina depressa, Siphonina prima, Chilosto- mella ovoidea, Globorotalia membranacea, Globorotalia vel- ascoensis, Dentalina colei, Bulimina cf. B. kugleri, Bulimina quadrata, Anomalina midwayensis, Anomalina pseudopa-		

pillosa at 1414-1435.

## Summary:

Pliocene to Recent (undifferentiated)	59	59
Miocene (undifferentiated)	61	120
Oligocene (undifferentiated)	100	220
Upper Eocene (Ocala limestone)	406	626
Middle Eocene (Lisbon formation)	324	950
Middle Eocene (Tallahatta formation)	<b>144</b>	1,094
In lower Eocene (Wilcox group, undifferentiated)	320	1,414
Paleocene (Clayton formation)	21	1,435

## **Potential Water-Bearing Zones:**

Limestone	610	730
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#### CHATHAM COUNTY

Location: In Bloomingdale Well No.: GGS 394 Owner: No. 1 Lowman priller: Layne-Atlantic Company Drilled: 1954 Thickness Depth (feet) (feet) pliocene to Recent (Undifferentiated): Clay: dark-gray to tan to red (mottled), very sandy, limonitic.... 5 Sand: very coarse-grained (up to gravel size), subrounded, arkosic; interbedded clay, dark-brown, somewhat indurated and tough, silty, lignitic, micaceous (finely disseminated flakes) 55 60 In Miocene (Undifferentiated): Clay: dark-green, sandy, phosphatic, micaceous 35 95 Phosphatic fragments common at 75-85. Indurated sand (or sandstone): yellowish-green to darkgreen, somewhat iron-stained, fine-grained, argillaceous, micaceous (finely disseminated flakes) 126 31 Clay: dark-green, sandy, somewhat blocky, phosphatic 134 260 Dolomitic limestone: light-brown, saccharoidal, sandy, phos-18 278phatic Limestone: light-gray to white, dense, sandy, phosphatic, fossiliferous (fragments and casts of megafossils)  $\mathbf{7}$ 285 **Oligocene (Undifferentiated):** Limestone: light-gray, rather dense (calcitized), nodular, fossiliferous (echinoid and bryozoan remains, Ostracods and Foraminifera) 5 290Limestone: white, soft and chalky (weathered), fossiliferous

Rotalia mexicana var. at 280-290. Asterocyclina<sup>1</sup> sp. at 290-300.

(as above)

Limestone: yellow, saccharoidal (much calcitized and recrystallized), fossiliferous (fragments and molds of Gastropods, echinoid and bryozoan remains, Ostracods, and Foraminifera) 10 310

Quinqueloculina sp., Dictyoconus<sup>1</sup> sp., Gypsina globula<sup>1</sup> sp., Discorbis? sp. at 300-310.

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

5

300

	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)		60
In Miocene (undifferentiated)		285
Oligocene (undifferentiated)		310
Potential Water-Bearing Zones:		
Limestone		310

### CHATHAM COUNTY

Location: Strachan Ave. near Vernon	River, Savannah	Well No.: GGS 3	395
Owner: No. 1 Boy Scouts (Savannah)			
Driller: Layne-Atlantic Company			
Drilled: 1954			
		Thickness	Depth

Thickness (feet)	(feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, angular, arkosic, finely dis- seminated phosphatic grains	25	25
Clay: dark-gray, silty, lignitic, micaceous, fossiliferous (mac- roshells at certain horizons)	10	35
Sand: coarse-grained, subangular, phosphatic, arkosic	10	45
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic at depth	180	225
Reddish-brown, phosphatic fragments common at 107-117.		
Limestone: light-gray, dense, somewhat dolomitized and sac- charoidal, sandy, phosphatic, fossiliferous (fragments and casts and molds of megafossils, and some Foraminifera)	25	250
Elphidium cf. $E.$ discoidale, Cibicides concentricus at 225-230.		

## Oligocene (Undifferentiated):

Limestone: light gray to cream, nodular to granular (in tex-		
ture), much calcitized, soft (somewhat weathered) and		
chalky, fossiliferous (echinoid and bryozoan remains, Ostra-		
cods, and Foraminifera)	79	32 <b>9</b>

Rotalia mexicana var., Nonionella hantkeni var. at 250-260.

	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)	45	45
Miocene (undifferentiated)		250
Oligocene (undifferentiated)		329
Potential Water-Bearing Zones:		
Limestone	79	329

## CHATHAM COUNTY

		No.: GGS : 16 <sup>1</sup>	396
Driner. Lugno reducte company		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine-grained, phosphatic (finely disseminated)		5	5
Clay: bluish-gray to red (mottled), very sandy, micace sand, as above		5	10
Sand and clay: as above; some clay, dark-prown, some indurated, lignitic, micaceous		8	18
Sand: coarse-grained (up to gravel size), subrounded, ar	cosic.	7	25
Miocene (Undifferentiated): Clay: yellowish to dark-green, sandy, phosphatic, micac			
(finely disseminated flakes); interbedded dolomitic l stone, light-brown, saccharoidal, sandy, phosphatic		190	215
Phosphatic pebbles common at 75-85.			
Dolomitic limestone prominent at 140-150.			
Limestone: white, dense, sandy, phosphatic, fossilife (fragments, casts and molds of megafossils, and some Os cods and Foraminifera)	stra-	15	230
Elphidium sp., Nonion pizarensis, Valvulineria florid Nonion advena, Discorbis subaraucana, Cibicides lobat Cibicides concentricus at 210-220.			
Pyrgo sp. at 220-230.			
No samples		10	240

<sup>&</sup>lt;sup>1</sup>Average elevation taken from State Highway map.

	Thickness (feet)	Depth (feet)
In Oligocene (Undifferentiated):		
Limestone: cream, somewhat crystalline (calcitized), rather massive, nodular, fossiliferous (casts and molds of Gastro- pods, bryozoan remains, and Foraminifera)		310
Quinqueloculina sp., Pyrgo sp., Rotalia mexicana var., Dictyoconus <sup>2</sup> sp., Gypsina globula <sup>2</sup> at 240-260.		
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray to white at depth, crystalline (much cal- citized), fossiliferous (macroshells, abundant echinoid and bryozoan remains, Ostracods, and Foraminifera)	190	500
Operculinoides cf. O. floridensis at 300-320. Operculinoides floridensis at 340-360.		
Limestone: cream, granular (highly calcitized), fossiliferous (abundant bryozoan remains and abundant "larger Fora- minifera")		720
Asterocyclina sp., Camerina striatoreticulata, Operculina mariannensis at 500-520.		
Lepidocyclina (Polylepidina) antillea <sup>2</sup> at 520-540.		

## Summary:

Pliocene to Recent (undifferentiated)	25	25
Miocene (undifferentiated)	205	230
No samples	10	240
In Oligocene (undifferentiated)		310
In upper Eocene (Ocala limestone).	410	720

# Potential Water-Bearing Zones:

Limestone	480	720
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### Remarks:

Overall quality of well cuttings poor.

<sup>&</sup>lt;sup>2</sup>Reworked(?) fossil of middle Eocene age.

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### CHATHAM COUNTY

Location: Cherokee Hill, Port WentworthWellOwner: No. 1 Port WentworthElev.Driller: Mineral Development CompanyDrilled: October 1955		5 506
Dillier. conser 1990	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, phosphatic (finely disseminated), arkosic interbedded clay, dark-gray, somewhat indurated, silty, car		
bonaceous, micaceous		45
Sand: coarse-grained, subrounded, arkosic	2	47
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic, micaceous, cherty (a depth)	it 214	261
Reddish-brown phosphatic fragments and dark-green cher prominent at 175-180.	•t	
Dolomitic limestone: light-brown, saccharoidal, sandy		265
Limestone: light-gray to white, sandy, phosphatic, fossilifer ous (fragments and molds of megafossils, echinoid and bryc zoan remains, and some Foraminifera)	)-	270
Elphidium sp., Discorbis subaraucana at 268-270.		
Oligocene (Undifferentiated):		
Limestone: cream, somewhat soft and chalky (weathered) fossiliferous (casts and molds of megafossils, echinoid an bryozoan remains, and some Foraminifera)	d	305
Quinqueloculina sp., Pyrgo sp., Nonionella hantkeni var Rotalia mexicana var. at 271-273.	••,	
Asterocyclina <sup>1</sup> sp., Gypsina globula <sup>1</sup> , Lepidocyclina (Pol <sub>l</sub> lepidina) antillea <sup>1</sup> at 288-293.	<i>y-</i>	
Limestone: cream to yellowish-brown, saccharoidal, rathe massive, fossiliferous (fragments and molds of Gastropod echinoid and bryozoan remains, and Foraminifera)	s,	358
$Dictyoconus^1$ sp., $Discorbis$ ? sp., $Gypsina$ $globula^1$ , $Quin$ queloculina sp. at 305-310.	<i>n</i> -	
Quinqueloculina sp. abundant at 330-335.		

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

	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray to white at depth, massive, crystalline (much calcitized), fossiliferous (abundant bryozoan re- mains and some Foraminifera)	142	500
Asterocyclina sp. at 355-360.		
Operculinoides cf. O. floridensis at 370-380.		
Asterocyclina nassauensis at 410-420.		
Pseudophragmina flintensis at 490-500.		
Limestone: cream, granular, sparsely but coarsely glauconitic, sandy (at depth), fossiliferous (abundant echinoid and bryo- zoan remains and abundant "larger Foraminifera"; inter- bedded saccharoidal limestone, light-gray, massive, crystal- line, sparsely but coarsely glauconitic, fossiliferous (abun- dant echinoid and bryozoan remains and abundant "larger Foraminifera")	230	730
Lepidocyclina (Polylepidina) sp., Asterocyclina monticellen- sis at 510-520. Asterocyclina sp., Camerina striatoreticulata prominent at 530-540.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: white to light-gray, massive, crystalline, coarsely but sparsely glauconitic, fossiliferous (fragments, casts and molds of megafossils, abundant echinoid and bryozoan re- mains, and some Foraminifera); interbedded calcitized limestone, light-gray, saccharoidal.	160	890
Lepidocyclina antillea? at 730-740.		
Asterocyclina monticellensis at 740-750. Gyroidina nassauensis, Discorbis inornatus at 804 (core). Cibicides westi, Cibicides pseudoungerianus var. lisbonensis at 820 (core). Macroshells abundant at 860-890.		
Macroshells abundant at 860-890.		
Limestone: cream, granular, somewhat saccharoidal, rather loosely consolidated, sparsely glauconitic, pyritiferous, chert	y 110	1,000
Brown chert prominent at 920-930.		
Tallahatta Formation:		
Marl: light-gray, partially indurated, coarsely glauconitic (abundantly glauconitic at certain levels), fossiliferous, (some Foraminifera at certain horizons)	88	1,088
Cibicides blanpiedi at 1006.		
Cibicides blanpiedi, Cibicides tallahattensis at 1079.		

₹<sup>2</sup>...

•	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)         Miocene (undifferentiated)         Oligocene (undifferentiated)         Upper Eocene (Ocala limestone)         Middle Eocene (Lisbon formation)         Middle Eocene (Tallahatta formation)	223 88 372 270	47 270 358 730 1,000 1,088

# **Potential Water-Bearing Zones:**

Limestone		620	890
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### CHATHAM COUNTY

Location: Port Wentworth Owner: No. 1 Savannah Electric and Power Company Driller: Layne-Atlantic Company	r: No. 1 Savannah Electric and Power Company Elev.: 16	
	Thickn (feet	
No samples		) 60
In Pliocene to Recent (Undifferentiated):		
Sand: coarse-grained, subrounded, arkosic; clay, dark-br carbonaceous, and micaceous	•	) 70
Miocene (Undifferentiated):		
Sand: fine to coarse-grained, phosphatic		80
Dark-green chert prominent at 170-180.		
Clay: dark-green, sandy, phosphatic and cherty at depth		260
Dolomitic limestone: light-brown, saccharoidal, sandy, phatic		0 270
No samples		0 280
Limestone: light-gray to white, dense, sandy, phosphatic siliferous (fragments, casts and molds of megafossils, zoan remaing, and Ostracods)	bryo-	0 300

	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: white, somewhat soft and chalky (weathered?) fossiliferous (echinoid and bryozoan remains and some Fora- minifera)		31 <b>5</b>
Asterocyclina <sup>1</sup> sp., Gypsina globula <sup>1</sup> , Eponides byramensis, Robulus articulatus, Discorbis cf. D. tentoria at 300-310. Dictyoconus <sup>1</sup> sp., Quinqueloculina sp. at 320-330.		
Limestone: cream, saccharoidal (much calcitized), fossilifer- ous (Foraminifera)	45	360
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, crystalline (much calcitized), dense, massive, fossiliferous (fragments and molds of megafossils, bryozoan remains, and some Foraminifera)	18	378
Limestone: white, somewhat crystalline (much calcitized), fossiliferous (abundant bryozoan remains and some Fora- minifera)	30	408
Limestone: light-gray, crystalline (highly calcitized), dense, pyritiferous, coarsely glauconitic at depth, fossiliferous (macroshells, abundant echinoid and bryozoan remains, and Foraminifera)	77	485
Limestone: cream, somewhat softer than above, granular (in texture), fossiliferous (macroshells, abundant echinoid and bryozoan remains, and Foraminifera)	209	694
Camerina striatoreticulata, Gypsina globula, Operculina mariannensis prominent at 490-500. Lepidocyclina antillea <sup>1</sup> at 559-569.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: white to light-gray, massive, crystalline, coarsely but sparsely glauconitic, fossiliferous (fragments, casts and molds of megafossils, abundant echinoid and bryozoan re- mains, and some Foraminifera); interbedded limestone, light-gray, saccharoidal	132	826
Lepidocyclina antillea? at 699-709.		
Asterocyclina monticellensis at 696-706.		
Limestone: cream, granular, cherty, pyritiferous	110	936
Tallahatta Formation:		
Limestone: cream, granular, cherty, pyritiferous, abundantly glauconitic, fossiliferous (Foraminifera)	20	956
Asterocyclina sp., Cibicides blanpiedi at 936-946.		

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

	(feet)	(feet)	
Summary:			
No samples	60	60	
In Pliocene to Recent (undifferentiated)	10	70	
Miocene (undifferentiated)	230	300	
Oligocene (undifferentiated)	60	360	
Upper Eocene (Ocala limestone)		694	
Middle Eocene (Lisbon formation)		936	

# Potential Water-Bearing Zones:

Middle Eocene (Tallahatta formation)

Limestone	526	826
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#### CHATHAM COUNTY

20

Location: Isle of Hope	Well No.: GGS 535
Driller: A. E. Cory and Son	Elev.: 16 <sup>1</sup>
Drilled: 1956	
	Thickness Depth (feet) (feet)

### **Pliocene to Recent (Undifferentiated):**

Sand: fine-grained to coarser-grained at depth, finely dissemi- nated phosphatic grains; interbedded clay, dark-gray to black, somewhat fissile, lignitic, micaceous, fossiliferous (megafossils at certain levels) Macroshells prominent at 15-30.	50	50 •
Miocene (Undifferentiated):		
Clay: dark-green, sandy, much sandier at depth, phosphatic	140	190
Limestone: light-gray to light-brown, very dense (much calci- tized), sandy, phosphatic, dolomitized at certain levels, fossiliferous (casts and molds of megafossils)	45	235
Oligocene (Undifferentiated):		
Limestone: light-gray, dense (much calcitized), granular, crystalline, sandy, fossiliferous (some echinoid remains and Foraminifera)	45	280
Rotalia mexicana var., Quinqueloculina sp. at 240-250.		
Dictyoconus <sup>2</sup> sp., Nonionella hantkeni var. at 260-270.		
14		

<sup>&</sup>lt;sup>1</sup>Average elevation taken from State Highway map. <sup>3</sup>Reworked(?) fossil of middle Eccene age.

105

956

Thickness Depth

	Thickness (feet)	Depth (feet)
Limestone: cream, rather massive, somewhat oolitic, fossil iferous (casts and molds of megafossils and some Fora	-	200
minifera)	40	320
Summary:		
Pliocene to Recent (undifferentiated)		50
Miocene (undifferentiated)		235
Oligocene (undifferentiated)		320
Potential Water-Bearing Zones:		
Limestone		320
CHA	атнам со	UNTY
Location: Mendel Avenue, Savannah Wel	1 No.: GGS	561
	v.: 17	
Driller: H. L. Penton		
Drilled: 1958	Thickness (feet)	Depth (feet)
No samples	15	15
In Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, subangular, sparsely phosphatic; some clay, dark-gray to dark-green, silty, micaceous, carbona ceous, fossiliferous (macroshells)	-	85
First observed macroshells at 20-25.		
Miocene (Undifferentiated):		
Clay: dark-green, blocky, sandy, phosphatic; interbedded sand fine to medium-grained, subangular, phosphatic		190
Reddish-brown to jet-black phosphatic pebbles common a 85-100.	t	
Light-brown, saccharoidal, sandy, phosphatic, dolomitic limestone at 190.	2	
Clay: yellowish-green, blocky, tough, sandy, phosphatic; in terbedded sand, fine to medium-grained, subangular, phos		

phatic \_\_\_\_\_

No samples

228

230

38

 $\mathbf{2}$ 

107

Thickness	Depth
(feet)	(feet)

# In Oligocene (Undifferentiated):

Limestone: cream, soft, chalky, sandy, fossiliferous (macro- shells, echinoid and bryozoan remains, Ostracods, and Fora-		
minifera)	20	250
No samples	10	260
Limestone: cream, somewhat nodular and calcitized, rather massive, fossiliferous (macroshells, bryozoan remains, Os- tracods and Foraminifera)	90	350
Textularia sp., Robulus sp., Discorbis sp., Nonionella hant- keni var. byramensis, Cibicides americanus at 260-270.		
Asterigerina subacuta, Nonionella hantkeni var. byramensis at 290-305.		
$Dictyoconus^1$ sp. at 305-325.		
Miliolidae common at 320-330.		

Gypsina globula<sup>1</sup>, Dictyoconus<sup>1</sup> sp. at 330-350.

#### Summary:

No samples	15	15
In Pliocene to Recent (undifferentiated)	<b>70</b>	85
Miocene (undifferentiated)	143	228
No samples	2	230
In Oligocene (undifferentiated)	120	350

### **Potential Water-Bearing Zones:**

Limestone		120	350
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## CHATHAM COUNTY

Location: Ferguson Avenue, Savannah	Well No.: GGS 562
Owner: No. 1 R. Knight	Elev.: 20
Driller: H. L. Penton	
Drilled: 1958	
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine-grained, subangular; some clay, dark-gray to dark-		
green, silty, micaceous, carbonaceous, fossiliferous (macro-		
shells at certain levels)	80	80

First observed macroshells at 30-40.

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

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: dark-green, somewhat blocky, sandy, phosphatic; inter- bedded sand, fine to medium-grained, subangular, phosphati	c 140	220
Reddish-brown to jet-black phosphatic pebbles and fish teeth prominent at 80-90.		
No samples	10	230
In Oligocene (Undifferentiated):		
Limestone: cream, soft, chalky, sandy, fossiliferous (macro- shells, echinoid and bryozoan remains, and Foraminifera)		280
Textularia sp., Rotalia mexicana var., Nonionella hantkeni var. byramensis, Nonionella oligocenica at 240-260.		
Limestone: cream, somewhat calcitized and massive, nodular, fossiliferous (macroshells, echinoid and bryozoan remains, and Foraminifera)	,	345
Summary:		
Pliocene to Recent (undifferentiated)	80	80
Miocene (undifferentiated)		220
No samples		230
In Oligocene (undifferentiated)	115	345
Potential Water-Bearing Zones:		
Limestone		345
CHA	THAM CO	UNTY
	l No.: GGS 7.: 11	563
Driffed: 1998	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, subangular; interbedded clay, dark-gray to dark-green, silty, micaceous, carbonaceous, fossiliferous (macroshells)	5	55

First observed macroshells at 20-25.

Macroshells abundant at 40-45.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L	109
	Thickness (feet)	Depth (feet)
Sand: coarse-grained, subrounded, sparsely phosphatic	10	65
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic; sand, as above	54	119
Reddish-brown to jet-black, phosphatic pebbles common at 65-70.		
Dolomitic limestone: light-brown, dense, saccharoidal, sandy, abundantly phosphatic	1	120
Clay: yellowish-green, blocky, somewhat tough, sandy, phos- phatic	30	150
Oligocene (Undifferentiated):		
Limestone: cream, soft, chalky, powdery, nodular and massive at depth, fossiliferous (fragments and molds of macroshells, echinoid and bryozoan remains, and Foraminifera)	95	245
Asterocyclina <sup>1</sup> sp. at 165-175. Textularia sp., Discorbis sp., Gypsina globula <sup>1</sup> , Cibicides lobatulus at 175-185.		
Nonionella oligocenica, Rotalia mexicana var., Dictyoconus sp. <sup>1</sup> at 185-195.		
Limestone: light-gray, much calcitized, somewhat nodular, massive, sandy, fossiliferous (as above)	10	255
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, somewhat crystalline and calcitized, fos- siliferous (abundant bryozoan remains and frequent Ostra- cods and Foraminifera)	110	365
Robulus arcuato-striatus var. carolinianus, Robulus alato- limbatus, Guttulina irregularis, Guttulina spicaeformis, Siphonina jacksonensis, Alabamina obtusa, Lingulina sp., Planularia sp., Cibicides lobatulus, Planulina cocoaensis, Asterocyclina nassauensis, Operculinoides floridensis at 255-265.		
Limestone: white, crystalline, somewhat saccharoidal, coarsely but sparsely glauconitic	30	395
Limestone: cream, considerably calcitized, granular	5	400

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

	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)	65	65
Miocene (undifferentiated)		150
Oligocene (undifferentiated)		255
Upper Eocene (Ocala limestone)	145	400
Potential Water-Bearing Zones:		
Limestone	250	400
СНАТТАНОО	CHEE CO	UNTY
Location: Near elevated steel reservoir, Har- mon Church, Fort Benning Military Reser- vation Owner: U.S. (Army) Govt.	S 18	
Driller: Layne-Atlantic Company		
	Thickness (feet)	Depth (feet)
Upper Cretaceous: Blufftown and Eutaw Formations (Undiffer Sand: fine to medium-grained, angular, limonitic, micaceous Sand: as above; some clay, lignitic, micaceous	60	60 120
Clay: gray to light-brown, lignitic, micaceous, fossiliferous (macroshells)	140	260
Sand: fine to coarse-grained, crystals of calcium sulfate	40	300
Clay: as above, but becoming somewhat mottled at depth; in- terbedded sand, fine to coarse-grained, angular, gypsiferous.		394
In Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic		484
Summary:		
Upper Cretaceous (Blufftown and Eutaw formations, undiffer- entiated)	394	394
In Upper Cretaceous (Tuscaloosa formation)		484

1	1	1

Thickness	Depth
(feet)	(feet)

### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	40	300
Sand: fine to coarse-grained	41	435

### Remarks:

Ground water derived from water-bearing sand at depth 260-300 is probably mineralized on account of the included crystals of calcium sulfate.

#### CHATTAHOOCHEE COUNTY

Location: South side of Upatoi Creek, west	Well No.: GGS 332	
side of Engineering Building, Fort Benning	Elev.: 240	
Military Reservation		
Owner: No. 1 Fort Benning Engineering School		
Driller: Layne-Atlantic Company		
Drilled: November 1952		
	Thickness (feet)	Depth (feet)

	(leet)	(leet)
Upper Cretaceous: Eutaw Formation:		
Sand: yellow, fine to medium-grained, argillaceous	5	5
Sand: as above; some clay, gray, micaceous	10	15
Sand: fine to coarse-grained, angular, somewhat arkosic	27	42
Tuscaloosa Formation:		
Kaolin: gray to somewhat mottled at depth, micaceous, sandy	32	74
Sand: fine to coarse-grained, angular, arkosic, micaceous; in- terbedded clay, gray to pale-green, somewhat waxy, micaceous	233	307
Summary:		
Upper Cretaceous (Eutaw formation) Upper Cretaceous (Tuscaloosa formation)		$\begin{array}{c} 42\\ 307\end{array}$

### Potential Water-Bearing Zones:

Sand: coarse-grained	21	166
Sand: coarse-grained	27	213
Sand: coarse-grained	39	307

### Remarks:

On the basis of other knowledge of this area it is felt that even better waterbearing sands occur at depths below total depth of above well.

## CHATTAHOOCHEE COUNTY

592

54

Location: 0.25 mi. south of junction of High- ways 26 and 280, few hundred yd. west of Highway 280, in Cusseta Owner: No 1 City of Cusseta Driller: Layne-Atlantic Company	Well No.: GGS Elev.: 550	5 341	
Drilled: May 1953		Thickness (feet)	Depth (feet)
Upper Cretaceous: Cusseta Sand:			
Sand: fine to coarse-grained, angular; interbo tled (light-gray to red), micaceous, sandy	• /	60	60
Blufftown Formation:			
Clay: tan to dark-gray to black at depth, carl ceous; interbedded sand, fine to medium-g	•		

micaceous	. 94	154
Limestone: gray, dense, crystalline, sandy, fossiliferous (mac- roshells)	6	160
Clay: dark-gray to black, carbonaceous, micaceous, pyritifer- ous, fossiliferous (macroshells, Ostracods, and Foraminifera at depth)	. 70	230
Clay (or marl): as above		305
Vaginulina texana at 230-240. Kyphopyxa christneri at 275-285.		
Sand: fine to medium-grained, angular; interbedded clay, as above	91	396
Clay (or marl): as above	31	427
Sand: fine to medium-grained, angular, micaceous; inter- bedded clay, as above	111	538
Eutaw Formation:		
Shale: dark greenish-gray to black, fissile, chloritic, carbona-		

ceous, fossiliferous at certain levels (macroshells and Ostracods)

1	1	2

Well Logs of the Coastal Plain of Georgia	L	113
	Thickness (feet)	Depth (feet)
Sand: fine to medium-grained, indurated at depth, abundantly micaceous, phosphatic, fossiliferous (macroshells and some Ostracods at certain horizons)	60	652
Tuscaloosa Formation: Upper Part:		
Sand: medium to coarse-grained, angular, arkosic, scattered grains of "rose quartz"; interbedded clay, mottled (yellow- ish to dark-green to red), somewhat fissile and splintery, iron-stained (particularly the green-colored clay), mica- ceous, sandy	318	970
Middle Part:		
Clay: mottled (dark-green to tan to red), somewhat fissile and splintery, iron-stained (particularly the green-colored clay), micaceous, sandy; interbedded sand, medium to coarse-grained, angular, arkosic	133	1,103
Lower Part:		
Sand: medium to coarse-grained, rather massive, angular, ar- kosic; interbedded clay, as above	82	1,185
Basement Complex (Undifferentiated):		
Crystalline rock: light-gray, argillaceous (weathered), to dense, dark-gray (fresh, unweathered), abundantly mica- ceous <sup>2</sup>	20	1,205
Summary:		
Upper Cretaceous (Cusseta sand)	60	60
Upper Cretaceous (Blufftown formation)		538
Upper Cretaceous (Eutaw formation)	114	652
Upper Cretaceous (Tuscaloosa formation)	533	1,185
Basement complex (undifferentiated)	20	1,205
Potential Water-Bearing Zones:		
Sand: fine to medium grained	111	528

Sand: fine to medium-grained	111	538
Sand: medium to coarse-grained	318	970
Sand: medium to coarse-grained	82	1,185

<sup>&</sup>lt;sup>1</sup>Not pure rose quartz, but iron-stained grains of quartz. <sup>2</sup>Mostly biotite mica.

#### 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	Well No.: GGS 40	2
39, 0.4 mi. north of Highway 37, in Fort Gaines	Elev.: 390	
Owner: No. 1 Speight School		
Driller: Layne-Atlantic Company		
Drilled: August 1954		
	Thickness Dept (feet) (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)	<b>27</b>	27
Limestone: as in above sample	18	45
Cibicides westi at 27-35.		
Clay: yellowish-green, sandy, somewhat indurated; some lime- stone, gray, dense, crystalline, sandy, fossiliferous (macro-		
shells)	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 indur- ated and tough at depth, micaceous, fossiliferous (some Foraminifera); limestone, light-gray, dense, sandy, coarsely glauconitic	24	110
Cibicides tallahattensis, Valvulineria jacksonensis 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

Eponides dorfi, Anomalina sp., Asterigerina sp. at 190-209.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L	115
	Thickness (feet)	Depth (feet)
Clay: as above	103	312
Sand: fine to medium-grained, subangular, abundantly glau- conitic; some clay, as above	20	332
Paleocene: Midway Group: Clayton Formation:		
Clay: gray to tan to red (mottled), sandy, micaceous, baux- itic(?); sand, fine to coarse-grained, subangular, scattered grains of pale-green quartz	18	350
Clay (or fuller's earth): light-gray, sandy, carbonaceous, mi- caceous	20	370
Indurated sand: fine-grained, somewhat argillaceous, glauco- nitic, fossiliferous (Foraminifera)	20	390
Operculinoides catenula common at 385-391.		
Limestone: light-gray, somewhat argillaceous, sandy, fossili- ferous (casts and fragments of megafossils, bryozoan re- mains, Ostracods, and Foraminifera)	110	500

#### Summary:

Middle Eocene (Lisbon formation)	86	86
Middle Eocene (Tallahatta formation)	104	290
Lower Eocene (Wilcox group, undifferentiated)	<b>142</b>	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.

CLAY COUNTY

	No.: GG : 400	S 435
г	hickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Tallahatta Formation:		
Sand: fine to coarse-grained, subangular; clay, brick-red, sandy, limonitic	43	43
Sand: fine to coarse-grained, subangular; limestone, yellow- ish and leached, sandy; some clay, yellowish-green with some gray to chocolate-colored, blocky, carbonaceous, sandy, micaceous; fragments of buhrstone (latter at depth), dark- gray to brown, extremely dense, opaque, and crystalline	41	84
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, carbonaceous; limestone, light-gray, dense, saccharoidal, coarsely glauconitic; sand, as above	41	125
Clay: dark-gray, silty, carbonaceous, pyritiferous	72	197
Sand: fine to medium-grained, subangular, indurated at cer- tain levels, abundantly glauconitic	31	228
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, scattered grains of pale-green quartz	41	269
Clay (or fuller's earth): light-gray, silty, blocky, carbona- ceous, micaceous; some sand, as above	29	298
Sand: coarse-grained, subangular; some clay, as above	5	30 <b>3</b>
Limestone: light-gray, somewhat soft and chalky, fossilifer- ous (fragments and casts of megafossils, bryozoan remains, Ostracods, and some Foraminifera)	79	38 <b>2</b>
Argyrotheca sp. at 310-330.		
Anomalina midwayensis at 330-351.		
Discorbis midwayensis var. at 351-371.		
Limestone: as above but dense (much calcitized), pyritifer- ous, sandy, sandier with depth	73	455

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WELL LOGS OF THE COASTAL PLAIN OF GEORG	IA		117
	Th (	ickness (feet)	Depth (feet)
Summary:			
Middle Eocene (Tallahatta formation)		84	84
Lower Eocene (Wilcox group, undifferentiated)		144	228
Paleocene (Clayton formation)		227	455
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		41	269
Limèstone		149	455
C	LAY	COUN	TY
	'ell f lev.:	No.: GG	S 464
Driller: Layne-Atlantic Company	164	400	
Drilled: 1955			
		nickness (feet)	Depth (feet)
		,	
Middle Eocene: Claiborne Group: Lisbon Formation:			
Sand: fine to coarse-grained; some clay, gray to red (mottled) sandy, limonitic		57	57
Sand: fine to coarse-grained; interbedded stringers of clay yellowish-green, sandy, micaceous	-	23	80
Sand: coarse-grained; some clay, tan to dark-brown, sandy		15	95
Limestone: yellowish-green to cream, dense, sandy, sparsel phosphatic, fossiliferous (fragments and molds of megafos sils, Ostracods, and Foraminifera)	5- 5-	51	146
Cibicides westi at 95-100.			
Tallahatta Formation:			
Sand: fine to coarse-grained, subangular, sparsely phosphatic some clay, yellowish-green with red streaks (mottled) sandy, micaceous	, ),	82	228
Cibicides tallahattensis, Valvulineria danvillensis var. 2 228-238.	ıt		
Lower Eocene: Wilcox Group (Undifferentiated):			
Clay: dark-gray, sandy, carbonaceous, micaceous; limestone	e,		

oray. dark-gray, sandy, carbonaceous, micaceous; miestone,		
light-gray, dense, crystalline, sandy, coarsely glauconitic,		
fossiliferous (some macroshells)	21	249

	Thickness (feet)	Depth (feet)
Clay: dark-gray, sandy, carbonaceous, micaceous, pyritiferous	116	365
Sand: fine to medium-grained, subangular, abundantly glau- conitic	13	378
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, grains of pale-green quartz	14	3 <b>92</b>
Clay: dark-gray, silty, carbonaceous, fossiliferous at depth (Ostracods and Foraminifera)		430
Eponides dorfi, Robulus wilcoxensis, Valvulineria wilcox- ensis, Valvulineria scrobiculata at 392-412.		
Limestone: light-gray, dense, crystalline but somewhat argil- laceous and "earthy," pyritiferous, fossiliferous (fragments and molds of megafossils, bryozoan remains, and some Fora-		
minifera)	24	454
Robulus midwayensis at 422-433.		

## Summary:

Middle Eocene (Lisbon formation)	146	146
Middle Eocene (Tallahatta formation)	82	228
Lower Eocene (Wilcox group, undifferentiated)	150	378
Paleocene (Clayton formation)	<b>76</b>	454

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	<b>14</b>	<b>392</b>
Limestone	<b>24</b>	454

Location: At City Water Works in Fort Gaines Owner: No. 3 City of Fort Gaines Driller: Layne Atlantic Company Drilled: 1958	Well No.: GGS 556 Elev.: 146	
Dimet. 1000	Thickness Depth (feet) (feet)	

CLAY COUNTY

# Pliocene to Recent (Undifferentiated):

Clay: gray to tan to reddish-brown (somewhat mottled),		
sandy, limonitic	11	11
Sand: medium-grained, angular, limonitic	5	16

		110
WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		119 Durth
Paleocene: Midway Group: Clayton Formation:	Thickness (feet)	Depth (feet)
•		
Sand: as above; marl, black, carbonaceous, micaceous, fossil- iferous (macroshells, echinoid spines, Ostracods and Fora- minifera)	7	23
Robulus sp., Valvulineria wilcoxensis, Valvulineria scrobi- culata, Eponides dorfi at 16-23.		
Sand: fine to coarse-grained, angular; marl, as above	77	100
Limestone: gray, dense, crystalline, sandy, pyritiferous, fos- siliferous (fragments, casts and molds of megafossils, bryo- zoan remains and Foraminifera)	34	134
Robulus midwayensis, Discorbis midwayensis var. trinita- tensis at 105-116.		
Sand: medium-grained, angular		161
Marl: gray, silty, micaceous; limestone, as above	6	167
Eponides lotus at 161-167.		
Limestone: gray, dense, crystalline, sandy, coarsely glauco- nitic, fossiliferous (fragments, casts and molds of megafos- sils)	6	173
Sand: fine to coarse-grained, angular		187
Upper Cretaceous: Providence Sand:		
Marl: dark, bluish-gray to black, highly micaceous, carbo- naceous, sandy, pyritiferous; sand, as above	21	208
Sand: fine to coarse-grained, angular, somewhat arkosic, in- durated at certain horizons; interbedded stringers of marl, gray, sandy, micaceous, fossiliferous at certain levels (mac- roshells, Ostracods and Foraminifera)	161	369
Anomalina clementiana at 213-223.		
Anomalina pseudopapillosa, glauconite prominent at 322-331.		
Dial. Due of the		
Ripley Formation:		
Marl: gray, sandy, micaceous	41	410
Marl: dark bluish-gray to black, silty, very micaceous, car- bonaceous, pyritiferous, sideritic, fossiliferous (macroshells, Ostracods and Foraminifera)	59	469
Robulus munsteri at 410-431.		

F

Robulus munsteri, Gaudryina rudita at 431-469.

	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)		16
Paleocene (Clayton formation)		187
Upper Cretaceous (Providence sand)		369
Upper Cretaceous (Ripley formation)	100	469
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		187
Sand: fine to coarse-grained	161	369
	CLINCH COU	JNTY
Location: 5 mi. east of Stockton	Well No.: GO	19 96
Owner: No. 1 J. E. Mathews	Elev.: 187	00 61
Driller: Winter Hardware Company	Elev., 101	
Drilled: March 1942		
	Thickness (feet)	Depth (feet)
No samples		10
In Pliocene to Recent (Undifferentiated):		
Sand: medium-grained, subrounded; (near bottom of in val) clay, brownish-gray		20
Clay: rather dark-brownish-gray, blocky, sandy, more sa with depth	•	40
Clay: as above but much sandier, light-brown to jet-black, ished, phosphatic pebbles <sup>1</sup>	-	100
Miocene (Undifferentiated):		
Clay: pale-yellowish-green, sandy, somewhat phosphatic		140
Clay: as above but somewhat indurated, tough		160
Limestone: white to cream, much calcitized, somewhat sacc roidal, sandy		180
Summary:		
No samples		10
In Pliocene to Recent (undifferentiated)		100
Miocene (undifferentiated)		180
Potential Water-Bearing Zones:		
Limestone		180
<sup>1</sup> Reworked from older beds of Miocene age.		

### **Remarks:**

More copious water supplies may be obtained by drilling deeper (than 180) into the water-bearing, underlying limestones of Oligocene and upper Eocene age.

### **CLINCH COUNTY**

	CLINCH COU	JNTY
Location: 17 mi. south of Homerville, Land Lot 200, 12th Land District Owner: No. 1 Gillican Driller: Georgia Resources Company	Well No.: GG Elev.: 187	S 124
Drilled: 1940		
	Thickness (feet)	Depth (feet)
No samples		248
In Miocene (Undifferentiated):		
Clay: dark-green, blocky, sandy		262
No samples		274
Sand: fine to coarse-grained, angular, somewhat arkosic, pl phatic		325
Clay: light-gray, sandy		328
Limestone: white, dense, sandy		350
Sand: fine to medium-grained, angular, phosphatic		360
Limestone: white, dense, sandy		370
Sand: as above, interbedded dolomitic limestone, light-bro saccharoidal		445
Oligocene (Undifferentiated):		
Limestone: cream, nodular, considerably calcitized, fossili ous (macroshells, echinoid and bryozoan remains, and so Foraminifera)	ome	520
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, fossiliferous (megafossils, echinoid bryozoan remains, and Foraminifera)		700
Asterocyclina sp., Operculinoides sp., Heterostegina sp., G sina globula at 520. Camerina striatoreticulata, Amphistegina pinarensis at 690-700.		

	Thickness (feet)	Depth (feet)
Dolomitic limestone: light-brown, saccharoidal	23	723
No samples	72	795
In Middle Eocene: Claiborne Group (Undifferentiated):		
Dolomitic limestone: light to dark-brown, saccharoidal, gypsi- ferous at certain horizons; interbedded limestone, gray to cream, fossiliferous at certain levels (Foraminifera)	397	1,192
Cribrobulimina floridana at 862-868.		
Limestone: cream to light-brown (latter dolomitic at certain levels), much calcitized, crystalline, cherty, fossiliferous (abundant Foraminifera at certain horizons)	315	1,507
Summary:		
No samples	248	248
In Miocene (undifferentiated)		445
Oligocene (undifferentiated)	75	520
Upper Eocene (Ocala limestone)		723
No samples		795
In middle Eocene (Claiborne group, undifferentiated)	712	1,507
Potential Water-Bearing Zones:		
Limestone		700
Remarks:		

The rocks below depth of 700 are predominantly gypsiferous dolomitic limestones, which yield mineralized water. Wells, therefore, should not be drilled below 700 in this area.

#### COFFEE COUNTY

	Well No.: GG Elev.: 310	S 236
Drilled: September 1951	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: bluish-gray to red (mottled), sandy, limonitic		20

Sand: fine to medium-grained, angular\_\_\_\_\_ 20 40

Well Logs of the Coastal Plain of Georgia		123
	Thickness (feet)	Depth (feet)
Clay: pale-green, blocky, sandy, phosphatic and fossiliferous at depth (macroshells); interbedded sand, fine to medium- grained, angular	385	425
Black phosphatic pebbles common at 280-310.		
Macroshells prominent at 410-425.		
Limestone: gray, sandy, fossiliferous (casts and molds of meg- afossils)	60	485
Archaias sp. at 425-435.		
Summary:		
Miocene (undifferentiated)	485	485
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	10	410
Limestone	60	485
Remarks:		

Better and more productive water-bearing limestones lie deeper than the total depth (485) of above well.

### **COFFEE COUNTY**

Location: Southern part of County, about 12 mi. south of Ambrose, in Heabern	Well No.: GGS 243 Elev.: 198
Owner: No. 1 Heabern School	
Driller: H. B. Truluck	
Drilled: October 1951	
	Thickness Depth (feet) (feet)

# Miocene (Undifferentiated):

-

Clay: bluish-gray to red (mottled), sandy, limonitic	20	20
Clay: light-gray, blocky, cherty at certain horizons, sandy, phosphatic at depth; interbedded sand, fine to coarse- grained, angular	220	240
Light-gray phosphatic pebbles at 130-140.		
Black phosphatic pebbles at 190-200.		
Dolomitic limestone: light-brown, saccharoidal	40	280
Chert bed	10	290

	Thickness (feet)	Depth (feet)
Summary:		
Miocene (undifferentiated)	290	290
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained Dolomitic limestone	10 40	110 280

### **Remarks:**

Dolomitic limestone yields mineralized water. The above well should have been drilled deeper in order to obtain water from Oligocene and upper Eocene limestones.

### **COFFEE COUNTY**

Location: In Nicholls	Well No.: GGS 434
Owner: City of Nicholls	Elev.: 180 <sup>1</sup>
Driller: M. M. Gray Drilling Company	

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: bluish-gray to red (mottled) sandy, limonitic		30
Sand: fine to coarse-grained, angular, arkosic	40	70
Clay: pale-green, sandy, phosphatic at depth; interbedded sand, fine to medium-grained, angular	110	180
Clay: light-gray to pale-green, blocky, sandy, phosphatic	110	290
Limestone: white, dense, crystalline, much calcitized, sandy	30	320
Clay: as above, but somewhat sandier		350
Limestone: white, dense, crystalline, much calcitized, sandy, phosphatic, fossiliferous (casts and molds of megafossils)	20	370
No samples	20	390
Limestone: as above	10	400

<sup>&</sup>lt;sup>1</sup>Average elevation taken from State Highway map.

Drilled: 1955

Well Logs of the Coastal Plain of Georgia	L	125
	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: gray to cream to light-brown at depth, rather mas- sive, nodular, crystalline, somewhat saccharoidal, much cal- citized, fossiliferous (casts and molds of Gastropods, some bryozoan remains and Foraminifera)		510
Pyrgo sp. at 400-410.		
Quinqueloculina sp., Rotalia mexicana var. at 410-420.		
$Dictyoconus \text{ sp.}^2$ at 420-430.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: as above, but light-gray and more calcitized at depth, fossiliferous (bryozoan remains and abundant Fora- minifera)	90	600
Lepidocyclina sp., Operculinoides floridensis at 510-520.		
Asterocyclina sp., Operculinoides sp. abundant at 530-540.		
Summerve		

### Summary:

Miocene (undifferentiated)	400	400
Oligocene (undifferentiated)	110	510
Upper Eocene (Ocala limestone)	90	600

# **Potential Water-Bearing Zones:**

 200	600
	200

# **COFFEE COUNTY**

Location: 200 ft. from north line, 2,000 ft. from east line	Well No.: GGS 445
of Land Lot 275, 1st Land District	Elev.: 193
Owner: No. 1-A Nina McLean	
Driller: Carpenter Oil Company	
Drilled: August 1954	
	Thickness Depth (feet) (feet)

# Miocene (Undifferentiated):

R.

Sand: fine to coarse-grained, angular, arkosic; interbedded		
clay, light-gray to pale-green, sandy, phosphatic and fossil-		
iferous at depth (macroshells)	200	200

<sup>2</sup>Reworked(?) fossil of middle Eocene age.

	Thickness (feet)	Depth (feet)
Limestone: white, dense, sandy, phosphatic, fossiliferous at certain levels (casts and molds of megafossils)		290
Oligocene (Undifferentiated):		
Limestone: light-gray, massive, highly calcitized and crystal- line, somewhat sandy, fossiliferous (some megafossils, bryo- zoan remains, and Foraminifera)	110	400
Quinqueloculina sp., Rotalia mexicana var., Gypsina globula <sup>1</sup> at $300-310$ .		
White, somewhat soft and granular limestone carrying <i>Lepidocyclina</i> <sup>1</sup> sp. at 340-350. <i>Lepidocyclina</i> <sup>1</sup> sp. at 380-390.		
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, somewhat soft and granular, fossiliferous (some bryozoan remains and Foraminifera); considerable limestone, as above	50	450
Lepidocyclina sp., Robulus arcuato-striatus var., Gypsina globula at 400-410.		
Operculinoides floridensis common at 430-440.		
Limestone: white, much calcitized, rather granular and loosely consolidated at depth, very fossiliferous, some macroshells, bryozoan remains, and abundant Foraminifera		575
Operculinoides floridensis and Asterocyclina nassauensis common at 500-510.		
Limestone: as above; interbedded dolomitic(?) limestone, brown, saccharoidal	100	675
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: cream, much calcitized, granular, cherty at certain levels, fossiliferous (echinoid and bryozoan remains and some Foraminifera)	155	830
Tallahatta Formation:		
Limestone: as above but glauconitic; interbedded brown lime- stone, saccharoidal, somewhat dolomitized?, glauconitic		915
Operculinoides sp., Lepidocyclina sp. at 840-850.		

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

	Thickness (feet)	Depth (feet)
Limestone: white to light-gray, rather massive, crystalline, glauconitic, sandy, fossiliferous (fragments and impressions of megafossils)	95	1,010
Lower Eocene: Wilcox Group (Undifferentiated):		
Indurated sand to white limestone at depth: fine to medium- grained, subangular grains, coarsely but rather abundantly glauconitic; interbedded brown limestone, dark-brown, sac- charoidal, glauconitic; sand, fine to coarse-grained, subangu- lar	135	1,145
Indurated sand: light-gray, fine-grained, glauconitic, mica- ceous; interbedded beds of clay, greenish-gray, laminated, micaceous; limestone, dark-gray, dense, crystalline, sandy, finely glauconitic	85	1,230
Paleocene: Midway Group: Clayton Formation:		
Limestone: light-gray, somewhat nodular, dense, crystalline, fossiliferous (fragments and molds of Gastropods)	60	1,290
Sand: fine to coarse-grained, subangular, indurated at certain levels; interbedded limestone, as above	230	1,520
Upper Cretaceous (Undifferentiated):		
Sand: fine to coarse-grained, indurated at certain levels, mi- caceous, pyritiferous; interbedded marl, gray, silty, some- what chalky, micaceous, fossiliferous at certain levels (mac- roshells, Ostracods, and Foraminifera)		1,903
Anomalina pseudopapillosa at 1520-1530.		
Gaudruing, rudita, at 1670-1680		

Gaudryina rudita at 1670-1680.

**8**\*'

Loxostoma plaitum at 1680-1690.

# Summary:

Miocene (undifferrentiated)	290	290
Oligocene (undifferentiated)	110	400
In upper Eocene (Ocala limestone)	275	675
Middle Eocene (Lisbon formation)	155	830
Middle Eocene (Tallahatta formation)	180	1,010
Lower Eocene (Wilcox group, undifferentiated)	220	1,230
Paleocene (Clayton formation)	<b>290</b>	1,520
Upper Cretaceous (undifferentiated)	383	1,903

		Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones: Limestone			575 830
	COLQ	QUITT CO	UNTY
Location: 80 ft. south of First Avenue at Water Works in Moultrie Owner: No. 4 City of Moultrie Driller: Stevens Southern Drilling Company Drilled: October 1943	Well Elev.	No.: GGS : 308	22
		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated): Sand: fine to coarse-grained, subangular; clay, dark-gr black, sandy, lignitic, limonitic	-	10	10
Sand: fine-grained, phosphatic (finely disseminated); clay, yellowish-green, somewhat indurated, tough		83	93
Clay: dark-green, somewhat indurated, blocky, sandy; bedded limestone, white to light-brown (latter dolom saccharoidal), rather massive, sandy	itized,	282	375
Limestone: white to light-brown (latter dolomitized, sa roidal), massive, somewhat saccharoidal, sandy			470
Dolomitic limestone: dark-brown, massive, saccharoidal.			495
Oligocene (Undifferentiated): Limestone: light-gray to brown, nodular, crystalline, much calcitized, fossiliferous (Ostracods and abu Foraminifera); interbedded dolomitic limestone, brown, saccharoidal, massive Rotalia mexicana var., Asterigerina sp., Lepidocyclina 495-505.	ndant dark-	50	545
Upper Eocene: Jackson Group: Ocala Limestone:			•

Dolomitic limestone: light-brown, saccharoidal, massive 155 700

WELL LOGS OF THE COASTAL PLA	AIN OF GEORGIA
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	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Lisbon Formation		
Limestone: cream, granular, much calcitized, fossiliferous (macroshells, echinoid and bryozoan remains and Foramini- fera)	100	800
Robulus alato-limbatus, Lenticulina fragaria var., Nodosaria latejugata var., Eponides jacksonensis at 700-720. Asterocyclina sp. at 760-775.		

#### Summary:

Pliocene to Recent (undifferentiated)	10	10
Miocene (undifferentiated)	485	495
Oligocene (undifferentiated)	50	545
Upper Eocene (Ocala limestone)	155	700
Middle Eocene (Lisbon formation)	100	800

#### **Potential Water-Bearing Zones:**

Limestone	100	800
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#### **Remarks:**

Dolomitic limestone yields hard water. The strata of Oligocene age in the above well are composed largely of dolomitic limestone. The underlying limestones of Ocala age constitute the principal source of ground water in this well.

### COLQUITT COUNTY

<ul> <li>Location: 760 ft. west of east line, 210 ft. north of south line, Land Lot 270, 8th Land District</li> <li>Owner: No. 1 D. G. Arrington</li> <li>Driller: R. T. Adams Drilling Company</li> <li>Drilled: August 1948</li> </ul>	Well [ Elev.	No.: GGS : 270 (derrick	
		Thickness (feet)	Depth (feet)
No samples		120	120
In Miocene (Undifferentiated):			
Clay: pale-green, sandy; interbedded limestone, white, phosphatic, somewhat dolomitized at certain levels, s fossiliferous at depth (casts and molds of megafossils	andy,	270	390

Casts and molds of megafossils prominent at 330-340.

#### Thickness Depth (feet) (feet) Oligocene (Undifferentiated): Limestone 70 460 Upper Eocene: Jackson Group: Ocala Limestone: Dolomitic limestone: dark-brown, saccharoidal 230690 Middle Eocene: Claiborne Group (Undifferentiated): Limestone: cream, calcitized and granular, somewhat loosely consolidated, cherty at certain levels 380 1,070 Limestone: as above but coarsely glauconitic 1301,200 Operculinoides sp. at 1070-1080. Lower Eocene: Wilcox Group (Undifferentiated): Marl: light-gray, silty, micaceous, glauconitic with finely disseminated grains 35 1,235Marl: as above but somewhat indurated, sandy, carbonaceous. micaceous 1.290 55 Paleocene: Midway Group: Clayton Formation: Limestone: light-gray to white, dense, crystalline much calcitized, coarsely glauconitic, fossiliferous (macroshells and some Foraminifera) 1.320 30 Pseudophragmina stephensoni at 1290-1300. Operculinoides catenula at 1320-1330. Indurated sand: gray, dense, crystalline, somewhat argillaceous, glauconitic (finely disseminated), fossiliferous at certain levels (macroshells and Foraminifera) 1.450130Limestone: gray, dense, crystalline, coarsely glauconitic, fossiliferous (megafossils and some Foraminifera) 160 1,610 Limestone: as above, but cherty\_\_\_\_\_ 70 1.680 Cretaceous (Undifferentiated): Marl: gray, silty, micaceous, chalky, pyritiferous, fossiliferous at certain levels (megafossils, Ostracods, and Foramini-2,800 fera) Globotruncana sp., Gaudryina sp., Guembelina sp. at 1680-1690. Kyphopyxa christneri at 2360-2370. Vaginulina texana at 2580-2590.

130

#### GEORGIA GEOLOGICAL SURVEY BULLETIN 70

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, somewhat indurated at certain horizons, glauconitic, phosphatic, fossiliferous (macro- shells); interbedded clay or shale, greenish-gray, somewhat	990	2 0 2 0
fissile, micaceous	220	3,020
Sand: coarse-grained, angular, arkosic; interbedded clay, dark-gray, laminated, micaceous	280	3,300
Shale: dark-gray, fissile, micaceous, carbonaceous	135	3,435
Shale: as above; interbedded sand, medium-grained, glaucon- itic, fossiliferous (macroshells)	110	2,545
Clay: greenish-gray to purple, sandy, micaceous; interbedded sand, coarse-grained, angular, arkosic; and limestone, gray, crystalline, glauconitic	1,364	4,909

### Summary:

No samples	120	120
In Miocene (undifferentiated)	<b>270</b>	390
Oligocene (undifferentiated)	<b>70</b>	460
Upper Eocene (Ocala limestone)	230	690
Middle Eocene (Claiborne group, undifferentiated)	510	1,200
Lower Eocene (Wilcox group, undifferentiated)	90	1,290
Paleocene (Clayton formation)	390	1,680
Cretaceous (undifferentiated)	3,229	4,909

## **Potential Water-Bearing Zones:**

Limestone		<b>70</b>	460
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### Remarks:

**Except** for Oligocene limestones, no good aquifers were observed in above well. All sands in the deeply buried Cretaceous strata doubtless contain salt water and are not suitable as sources of potable ground water.

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# COLQUITT COUNTY

CU	LUUITI CO	UNTY
,,,,,,, _	ell No.: GGS ev.: 317	175
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		50
Clay: yellowish-green, sandy; interbedded sand, fine to coars grained, angular, arkosic		250
Limestone: white, dense, sandy, dolomitized at certain level interbedded clay and sand, as above		460
Oligocene (Undifferentiated):		
Limestone: cream, nodular, much calcitized, fossilifero (casts and molds of molluscan shells, echinoid and bryozo remains, and Foraminifera); interbedded tongues of pa tially dolomitized limestone, light-brown, somewhat sacch roidal, massive, fossiliferous (Foraminifera including abu dant Miliolids)	an nr- na- nn-	540
Rotalia mexicana var., Asterigerina subacuta at 460-470.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Dolomitic limestone: dark-brown, saccharoidal, unfossilifer	ous. 160	700
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: cream, somewhat nodular, much calcitized, gran lar, fossiliferous (bryozoan remains and some Foraminif		1,000
Lepidocyclina sp. common at 700-710.		
Summary:		
Miocene (undifferentiated)	460	460
Oligocene (undifferentiated)		540
Upper Eocene (Ocala limestone)		700
Middle Eocene (Lisbon formation)		1,000
Land Docomo (Masson Pormanon)		1,000

# Potential Water-Bearing Zones:

Limestone		300	1,000
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#### **Remarks:**

Because the dolomitic limestone contains gypsum and yields hard water, it is not a good source of ground water. The best available aquifer in this well appears to be the interval 700-1000.

### COLUMBIA COUNTY

Location: Approximately 1 mi. north of Highway 12 on top of high hill, in Grovetown Owner: No. 1 City of Grovetown Driller: Virginia Supply and Well Company Drilled: 1951	Well No.: GGS Elev.: 500	GS 264	
Drilled: 1991	Thickness (feet)	Depth (feet)	
Upper Eocene: Jackson Group: Barnwell Formation:			
Sand: argillaceous, tan, fine to medium-grained, lim inclusions of kaolin, white, micaceous, somewhat sand	,	40	
Upper Cretaceous: Tuscaloosa Formation:			
Clay (or kaolin): gray, sandy	40	80	
Sand: yellow, fine to coarse-grained		88	
Kaolin: white, abundantly micaceous, sandy	47	135	
Basement Complex (Undifferentiated):			
Clay: yellow, very sandy, garnet and hornblende crysta	als 21	156	
Crystalline rock		300	
Summary:			
Upper Eocene (Barnwell formation)		40	
Upper Cretaceous (Tuscaloosa formation)		135	
Basement complex (undifferentiated)		300	
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		88	
Crystalline rock (fractures in)	<b> 14</b> 4	300	

# COOK COUNTY

Owner: City of Lenox Driller: Layne-Atlantic Company	Well No.: GG Elev.: 300 <sup>1</sup>	S 25
Drilled: June 1946	Thickness (feet)	Depti (feet)
No samples		2
In Miocene (Undifferentiated):		
Sand: medium to coarse-grained, subangular, somewhat lime itic	_	3
Clay: mottled, sandy, limonitic		5
No samples	6	6
Clay: yellowish-green, very sandy		6
Clay: light-gray, somewhat indurated, tough, sandy		7
No samples		10
Clay: as above; some limestone, white, sandy, cherty		12
Limestone: white to cream at depth, sandy	154	27
No samples		29
Limestone: as above, but saccharoidal, somewhat dolomitiz at certain levels, massive		29
No samples		31
Limestone: as above; fragments of limestone, gray, den nodular, somewhat sandy	•	35
No samples		39
In Oligocene (Undifferentiated):		
Limestone: cream, nodular, much calcitized, rather massi fossiliferous (bryozoan remains and increasing num (with increased depth) of Foraminifera)	per	49
Lepidocyclina cf. L. mantelli at 399. Dictyoconus <sup>2</sup> sp., Coskinolina <sup>2</sup> sp. at 429. Asterocyclina <sup>2</sup> sp. common, Gypsina globula <sup>2</sup> at 491		

<sup>&</sup>lt;sup>1</sup>Average elevation taken from State Highway map. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

	Thickness (feet)	Depth (feet)
Summary:		
No samples		25
In Miocene (undifferentiated)		358
No samples		399
In Oligocene (undifferentiated)	92	491
Potential Water-Bearing Zones:		
Limestone	173	491

Location: In AdelWellOwner: No. 4 City of AdelElev	COOK COUN	JK COUNTI	
	Well No.: GG Elev.: 240	S 39	
Driller: Layne-Atlantic Company			
Drilled: June 1946	Thickness (feet)	Depth (feet)	
No samples		15	
In Miocene (Undifferentiated):			
Clay: mottled, very sandy, limonitic		70	
No samples		80	
Clay: yellowish-green, blocky, sandy, phosphatic; interbed limestone, light-gray to white, dense, somewhat saccharoi sandy; sand, fine-grained, angular, phosphatic (finely seminated)	dal, dis-	165	
Gray, polished, phosphatic pebbles prominent at 80.			
No samples		185	
Dolomitic limestone: light-brown, extremely dense, crystall somewhat sandy; some limestone as above		185	
No samples		209	
In Oligocene (Undifferentiated):			
Limestone: light-gray to cream at depth, nodular, much citized, rather dense, cherty, fossiliferous (bryozoan mains and some Foraminifera)	re-	270	
Quinqueloculina sp., Dictyoconus <sup>1</sup> sp. at 209-209½. Quinqueloculina sp., Rotalia mexicana var. at 270.			

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

135

COOK COUNTY

Summary:	Thickness (feet)	Depth (feet)
No samples		15
In Miocene (undifferentiated)		185
No samples		209
In Oligocene (undifferentiated)		270
Potential Water-Bearing Zones:		
Limestone		270
Remarks:		
Sample intervals too large for accurate determination of form	national tops.	
· ·		
	COOK COUN	<b>TAX</b>
	COOK COUN	11
Location: 6 mi. west of Adel, 2 mi. south of Adel-Moultrie Highway, Land Lot 338, 9th Land District Owner: No. 1 D. F. Bruton Driller: W. B. Graham Driller: 4, 1046	Well No.: GG Elev.: 224 <sup>1</sup>	S 118
Drilled: 1946	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		60
Clay: gray to yellowish-green, sandy; interbedded sand, to coarse-grained, angular		140
Limestone: white, dense, crystalline, sandy; interbedded c yellowish-green, sandy		190
Oligocene (Undifferentiated):		
Limestone: light-gray to cream, nodular, much calcitized, siliferous (bryozoan remains and some Foraminifera)		280
Rotalia mexicana var. at 190-200. $Dicty oconus^2$ sp. at 270-280.		
Summary:		
Miocene (undifferentiated)	190	190
Oligocene (undifferentiated)		280
'Average elevation taken from State Highway map.		

<sup>1</sup>Average elevation taken from State Highway map. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

WELL LOGS OF THE COASTAL PLAIN OF GEOR	GIA	137
	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		,
Limestone		280
Bawawka		
Remarks:		
Samples of poor quality.		
(	COOK COUN	TY
Document	Vell No.: GG	S 122
Owner: No. 5 City of Adel E Driller: Layne-Atlantic Company	Elev.: 246	
Drilled: June 1946	<b>m</b> ) i i	
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, very sandy, limonitic		93
Clay: yellowish-green, blocky, sandy; interbedded limestor at depth, white, dense, sandy; beds of sand, fine to coars grained, angular	e-	200
In Oligocene (Undifferentiated):		
Limestone: light-gray, nodular, dense, much calcitized, foss iferous (some bryozoan remains and Foraminifera)		270
Rotalia mexicana var. at 231.		
Summer		
Summary:	000	
Miocene (undifferentiated) In Oligocene (undifferentiated)		200 270
Potential Water-Bearing Zones:		
Limestone		270
Remarks:		
Samples of poor quality.		

### CRISP COUNTY

Well No.: GGS 155

Owner: No. 3 City of Cordele Elev. Driller: Layne-Atlantic Company		5 199
Drilled: May 1948	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: gray to tan to red (mottled), very sandy		8
Clay: pale yellowish-green with red streaks (mottled), block sandy	• /	18
Sand: fine to coarse-grained, subangular, arkosic	11	29
Clay: light-brown, somewhat indurated, tough, very sandy		35
Clay: pale yellowish-green to dark-green with red strea (mottled) at depth, blocky, sandy		89
Sand: fine to coarse-grained, subangular, arkosic	4	93
Oligocene (Undifferentiated):		
Limestone: gray, extremely dense and crystalline, cherty, fo siliferous (some bryozoan remains and Foraminifera)		96
Rotalia mexicana var. at 93-96.		
Limestone: yellow, nodular, somewhat calcitized, sandy, fo siliferous (as above)		163
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, much calcitized, saccharoidal, fossiliferou (bryozoan remains and some Foraminifera)		300
Operculinoides sp. at 173-248.		
Lepidocyclina sp. at 248-270. Lepidocyclina sp., Gypsina globula, Camerina striatoretic lata at 270-300.	<i>m</i> -	
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: light-gray, micaceous, glauconitic, fossiliferous (For minifera); interbedded sand, fine to coarse-grained, ang lar, phosphatic, glauconitic	u-	371
Asterigerina sp., Discorbis yeguaensis at 300-330. Asterigerina lisbonensis, Cibicides westi at 330-371.		
Limestone: gray, dense, crystalline, sandy, fossiliferous depth (a coquina)		415

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Location: In Cordele

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		139
Tallahatta Formation:		
Sand: fine to coarse-grained, angular, phosphatic, fossilifer- ous (abundant macroshells)	78	493
Sand: fine to coarse-grained, angular, phosphatic	47	540
In Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: light-gray, silty, micaceous, carbonaceous.	44	584
Clay: light-brown, somewhat indurated and tough; sand, fine to coarse-grained, abundantly glauconitic	91	675
Paleocene: Midway Group: Clayton Formation:		
Limestone: light-gray, extremely dense, crystalline, sandy, coarsely glauconitic, fossiliferous (some bryozoan remains, casts and molds of megafossils, and some Foraminifera); clay, black, fissile, carbonaceous	110	785
Upper Cretaceous: Providence Sand:		
Sand: fine-to coarse-grained, subangular	31	816
Summary:		
Miocene (undifferentiated)	93	93
Oligocene (undifferentiated)	70	163
Upper Eocene (Ocala limestone)	137	300
Middle Eocene (Lisbon formation)	115	415
Middle Eocene (Tallahatta formation)	125	540
In lower Eocene (Wilcox group, undifferentiated)	135	675
Paleocene (Clayton formation)	110	785
Upper Cretaceous (Providence sand)	31	816

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## Potential Water-Bearing Zones:

Limestone	52	300
Sand: fine to coarse-grained	125	540
Sand: fine to coarse-grained	91	675
Sand: fine to coarse-grained	11	707
Sand: fine to coarse-grained	31	816

## CRISP COUNTY

	Well No.: GG Elev.: 271	S 216
	Thickness (feet)	Depth (feet)
No samples		10
In Residuum:		
Clay: mottled, sandy, lignitic, and fragments of resid limestone at depth		70
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: yellowish to white, fossiliferous (macroshe echinoid and abundant bryozoan remains, and Foraminif	,	160
Siphonina jacksonensis at 70-110.		
Operculina mariannensis at 140-150.		
Lepidocyclina sp. abundant at 150-160.		
Summary:		
No samples		10
In residuum		70
Upper Eocene (Ocala limestone)		160

# Potential Water-Bearing Zones:

Limestone		<b>70</b>	160
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	CRIS	SP COUN	ITY
Location: In Arabi Owner: No. 1 Marvin McKinney Driller: H. B. Truluck		No.: GG : 449	S 225
	י י	Thickness (feet)	Depth (feet)
No samples		80	80
In Miocene (Undifferentiated):			
Clay: yellowish-green to red (mottled), sandy, arkosic		20	100
Sand: medium to coarse-grained, angular		15	115

	Thickness (feet)	Depth (feet)
Clay: yellowish-green, sandy; fragments of limestone, white, sandy	35	150
Sand: fine to coarse-grained, angular, and fragments of resid- ual limestone	20	170
Oligocene (Undifferentiated):		
Limestone: white, fossiliferous (Foraminifera)	30	200
Lepidocyclina sp., Asterigerina subacuta at 170-180. Rotalia mexicana var. at 180-200.		

### Summary:

No samples	80	80
In Miocene (undifferentiated)	90	170
Oligocene (undifferentiated)	30	200

### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	15	115
Sand: fine to coarse-grained	20	170
Limestone	30	200

	CRISP COUNTY
Location: Veterans Memorial (State) Park Owner: No. 2 Veterans Memorial (State) Park Driller: Layne-Atlantic Company	Well No.: GGS 226 Elev.: 246
Drilled: May 1951	Thickness Dept (feet) (feet
Residuum :	
Clay: olive-green to tan, limonitic, sandy, sandier wi	th depth 46 4

#### Upper Eocene: Jackson Group: Cooper Marl:

Marl: cream, blocky, fossiliferous (Foraminifera)	20	66
Siphonina jacksonensis, Eponides jacksonensis, Eponides cocoaensis, Globulina gibba var., Cibicides lobatulus at 46-51.		
Robulus alato-limbatus, Bulimina jacksonensis, Uvigerina jacksonensis, Marginulina cocoaensis, Siphonina jacksonen-		

sis, Eponides jacksonensis, Eponides cocoaensis, Cibicides mississippiensis at 51-61.

	Thickness (feet)	Depth (feet)
Ocala Limestone:		
Limestone: cream, coarsely but sparsely glauconitic, fossil- iferous (echinoid and abundant bryozoan remains, and Foraminifera)	64	130
Asterocyclina sp., Operculina mariannensis, Camerina stria- toreticulata at 91-101.		
Summary:		
Residuum	46	46
Upper Eocene (Cooper Marl)		66
Upper Eocene (Ocala limestone)	64	130
Potential Water-Bearing Zones:		
Limestone	63	130

# CRISP COUNTY

Location: 0.5 mi. north of Cordele, about 0.25 mi. northeast of State Farmers' Market	Well No.: GGS 245 Elev.: 301
Owner: No. 1 W. D. Taunton	
Driller: H. B. Truluck	
Drilled: October 1951	
	Thickness Depth (feet) (feet)

### **Residuum**:

Sand: medium to coarse-grained, angular, fragments of lime- stone at depth	25	25
Clay: purple, sandy	15	40
Oligocene (Undifferentiated):		
Limestone: cherty, fossiliferous, at certain levels	25	65
Rotalia mexicana var., Quinqueloculina sp. at 40-50.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, fossiliferous (some Foraminifera)	25	90
Siphonina jacksonensis, Gypsina globula at 70-80.		
Asterocyclina sp. at 80-90.		

### Well Logs of the Coastal Plain of Georgia

Summary:	Thickness (feet)	Depth (feet)
Residuum	40	40
Oligocene (undifferentiated)	25	65
Upper Eocene (Ocala limestone)		90
Potential Water-Bearing Zones:		
Limestone	40	90

## CRISP COUNTY

Location: 3 mi. southeast of Cordele	Well No.: GGS	\$ 249
<b>Owner: No. 1</b> Thomas Clements	Elev.: 317	
Driller: H. B. Truluck		
Drilled: November 1951		
	Thislances	Donth

Thickness	Depth
(feet)	(feet)

## Miocene (Undifferentiated):

P<sup>re</sup>

Sand: fine to medium-grained, angular	10	10
Clay: tan to purple (mottled), sandy, fragments of residual limestone at depth	100	110
Sand: fine to coarse-grained, angular, and fragments of resid- ual limestone	10	120
Oligocene (Undifferentiated):		
Limestone: white, dense, crystalline, sparingly fossiliferous (echinoid and bryozoan remains, and Foraminifera)	40	160
Argyrotheca sp. at 130-140. Lepidocyclina mantelli at 150-160.		
Limestone: yellow, crystalline, highly calcitized, saccharoidal, dense, fossiliferous (macroshells, echinoid and bryozoan re- mains, and some Foraminifera)	40	200
Lepidocyclina sp. at 170-180.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, soft, rather porous, fossiliferous (echinoid and bryozoan remains, and Foraminifera)	20	220
Camerina striatoreticulata, Operculina mariannensis at 200- 220.		

	Thickness (feet)	Depth (feet)
Limestone: cream, somewhat calcitized, fossiliferous (abun-		
dant bryozoan remains and some Foraminifera)		230
Operculina mariannensis at 220-230.		

#### Summary:

Miocene (undifferentiated)	120	120
Oligocene (undifferentiated)	80	200
Upper Eocene (Ocala limestone)	30	230

### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	10	120
Limestone	110	230

### CRISP COUNTY

Location: At Hannah Branch on Lake Blackshear, south-	Well No.: GGS 250
west of Cordele	Elev.: 237
Owner: No. 1 Earle White	
Driller: H. B. Truluck	
Drilled: November 1951	
	Thickness Depth (feet) (feet)

### **Residuum:**

Sand: fine to medium-grained, angular; clay, mottled, sandy, and fragments of residual limestone	10	10
Clay: tan to olive-green, limonitic, very sandy, and fragments of residual limestone	30	40
Clay: dark-brown to black, lignitic, sandy, limonitic, and frag- ments of residual limestone	10	50
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white to cream, porous, fossiliferous (macroshells, echinoid and abundant bryozoan remains, Ostracods, and Foraminifera)	60	110
E ponides jacksonensis, Operculina mariannensis at 50-60. Lepidocyclina sp. common at 80-90.		
Limestone: yellow, dense, much calcitized, very sandy	20	130

# Middle Eocene: Claiborne Group: Gosport(?) Sand:

Sand: fine to	coarse-grained	, somewhat indurated,	angular	35	165

WELL LOGS OF THE	COASTAL	Plain	$\mathbf{0F}$	GEORGIA
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Thickness Depth (feet) (feet)

### Lisbon Formation:

Limestone: light-gray, rather dense, calcitized, sandy, glau-		
conitic, fossiliferous (macroshells, echinoid and bryozoan		
remains); interbedded marl, light-gray, glauconitic, fossil-		
iferous (macroshells, echinoid and bryozoan remains, and		
Foraminifera); sand, fine to medium-grained, angular,		
phosphatic, fossiliferous (a coquina at certain levels)	75	240
Foraminifera); sand, fine to medium-grained, angular,	75	240

Cibicides westi at 170-180.

Cibicides pseudoungerianus var. lisbonensis at 200-210.

#### Summary:

Residuum	50	50
Upper Eocene (Ocala limestone)	80	130
Middle Eocene (Gosport(?) sand)	35	165
Middle Eocene (Lisbon formation)	75	<b>240</b>

#### **Potential Water-Bearing Zones:**

Limestone	60	110
Sand: fine to coarse-grained	35	165
Sand: fine to coarse-grained	20	<b>240</b>

#### CRISP COUNTY

Location: 5 mi. southeast of Cordele	Well No.: GGS 251
Owner: No. 1 W. L. Wells	Elev.: 361
Driller: H. B. Truluck	
Drilled: November 1951	
	Thickness Depth (feet) (feet)

### Miocene (Undifferentiated):

Clay: yellowish-green to red to purple (mottled), somewhat blocky, sandy, limonitic; interbedded sand, fine to coarse- grained, angular	50	50
Limestone: white, rather dense, somewhat saccharoidal, sandy, cherty; interbedded clay, olive-green to tan (somewhat mot- tled), very sandy	120	170

## In Oligocene (Undifferentiated):

Limestone: white to cream, somewhat recrystallized and sac-

charoidal, more saccharoidal with depth, cherty, fossilif ous (echinoid and bryozoan remains and some Foraminif Rotalia mexicana var., Reussella byramensis, Nonion sp. 170-180. Coskinolina <sup>1</sup> sp., Rotalia mexicana var. at 180-190. Summary:	era) 80	Depth (feet) 250
•	1 = 0	
Miocene (undifferentiated) In Oligocene (undifferentiated)		$\frac{170}{250}$
In Ongocene (unuiterentiateu)		200
Potential Water-Bearing Zones:		
Limestone		250
	CRISP COU	
	Well No.: G Elev.: 316 Thickness (feet)	
Owner: No. 4 City of Cordele Driller: Layne-Atlantic Company	Elev.: 316	Depth <sup>2</sup>
Owner: No. 4 City of Cordele Driller: Layne-Atlantic Company Drilled: October 1954	Elev.: 316 Thickness (feet)	Depth <sup>2</sup>
Owner: No. 4 City of Cordele Driller: Layne-Atlantic Company Drilled: October 1954 	Elev.: 316 Thickness (feet)	Depth <sup>2</sup>
Owner: No. 4 City of Cordele Driller: Layne-Atlantic Company Drilled: October 1954 	Elev.: 316 Thickness (feet) d), 20	Depth <sup>2</sup> (feet)
Owner: No. 4 City of Cordele Driller: Layne-Atlantic Company Drilled: October 1954	Elev.: 316 Thickness (feet) d), 20 	Depth <sup>2</sup> (feet) 20
Owner: No. 4 City of Cordele Driller: Layne-Atlantic Company Drilled: October 1954	Elev.: 316 Thickness (feet) d), 20 	20 30

Pyrgo sp., Quinqueloculina sp. at 35-45.

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

<sup>2</sup>Depths below 635 feet were picked from electric log.

	147
10	120
30	150
90	240
15	255
25	280
30	310
26	336
	30 90 15 25 30

# Tallahatta Formation:

Sand: fine to coarse-grained, subangular, phosphatic, fossiliferous (common to abundant coquina); interbedded marl,

	Thickness (feet)	Depth (feet)
gray, silty, glauconitic, micaceous, fossiliferous (macro- shells, echinoid and bryozoan remains, Ostracods, and Fora- minifera)	194	530
Asterigerina lisbonensis at 390-400.		
Macroshells common to abundant at 380-410.		
Lower Eocene: Wilcox Group (Undifferentiated):		
Marl: dark-gray, silty, micaceous, carbonaceous, glauconitic, fossiliferous (macroshells, Ostracods, and Foraminifera)	50	580
Valvulineria scrobiculata, Robulus cf. R. wilcoxensis, Globu- lina gibba, Cibicides blanpiedi, Cibicides howelli, Anomalina sp. at 560-570.		
Sand: fine to coarse-grained, angular, abundantly glauconitic, green-tinted quartz grains; some marl, as above; limestone, gray, crystalline, coarsely glauconitic, sandy	10	590
Clay: dark-gray, silty, carbonaceous, micaceous, pyritiferous	15	605
Sand: fine to medium-grained, subangular, glauconitic; inter- bedded clay, as above	30	635
Sand: fine-grained, somewhat indurated, glauconitic	13	648
Paleocene: Midway Group: Clayton Formation:		
Clay: black, fissile, carbonaceous, micaceous, fossiliferous (Foraminifera)	10	658
Eponides lotus, Discorbis sp., Cibicides howelli at 640-650.		
Limestone: gray, crystalline, glauconitic, sandy, fossiliferous (macroshells, bryozoan remains, and some Foraminifera)	5	663
Eponides lotus, Cibicides newmanae at 650-660.		
Clay: dark-gray, silty, carbonaceous, micaceous; limestone, as above (probably "cave.")	17	680
Robulus midwayensis at 660-670.		

## Summary:

Residuum	35	35
Oligocene (undifferentiated)	75	110
Upper Eocene (Ocala limestone)	130	240
Middle Eocene (Gosport(?) sand)	15	255

	Thickness (feet)	Depth (feet)
Middle Eocene (Lisbon formation)	81	336
Middle Eocene (Tallahatta formation)	194	530
Lower Eocene (Wilcox group, undifferentiated)	118	648
Paleocene (Clayton formation)	32	680

## **Potential Water-Bearing Zones:**

Limestone	205	240
Sand: fine to coarse-grained	15	255
Sand: fine to coarse-grained	194	530
Sand: fine to coarse-grained	10	590

,

## DECATUR COUNTY

Flying School Owner: No. 3 U.S. (War Department) Basic Flying School Driller: Layne-Atlantic Company	Well No.: GG Elev.: 135	No.: GGS 49 .: 135		
Drilled: July 1942	Thickness (feet)	Depth (feet)		
No samples		190		
In Upper Eocene: Jackson Group: Ocala Limestone:				
Limestone: cream to light-brown at depth, much calciti somewhat saccharoidal, fossiliferous (macroshells, echir and bryozoan remains and Foraminifera)	noid	295		
Operculinoides sp., Amphistegina pinarensis var. at 190. Gypsina globula, Operculina mariannensis, Lepidocyclina at 222.	sp.			
Amphistegina pinarensis var. common, Lepidocyclina sp 285.	. at			
Lepidocyclina sp. common at 287.				
No samples		313		
In Middle Eocene: Claiborne Group: Lisbon Formation:				
Dolomitic limestone: light-gray, saccharoidal and crystalli	ne	327		
Limestone: light-gray to white, very dense, much calcitiz coarsely glauconitic, fossiliferous (macroshells, bryozoan mains, and Foraminifera)	re-	339		
Limestone: light-gray, granular, glauconitic with finely seminated grains, very sandy, fossiliferous (some mac shells, and bryozoan remains)	ero-	390		
success, and sijoboun romand)	·····	000		

	Thickness (feet)	Depth (fe <b>et)</b>
Indurated sand: light-gray to pale-yellowish-green, fine to medium-grained, somewhat argillaceous, glauconitic (finely		
disseminated grains), fossiliferous (macroshells)	17	407
Marl: pale-yellowish-green, sandy, glauconitic, somewhat in- durated, fossiliferous (Ostracods and Foraminifera)	10	417
Cibicides westi at 407.		

## Summary:

No samples In upper Eocene (Ocala limestone)	190 105	190 295
No samples	18	313
In middle Eocene (Lisbon formation)	104	417

## Potential Water-Bearing Zones:

Limestone	· · · · · · · · · · · · · · · · · · ·	105	295

## DECATUR COUNTY

	Well No.: GGS Elev.: 135	57
Driller: Layne-Atlantic Company	Thickness (feet)	Depth (feet)
Residuum:		
Clay: bluish-gray to pink to purple (mottled), sandy, lime	onitic 20	20
Sand: fine to coarse-grained, subangular; some limest white, much calcitized and crystalline	,	55
No samples		115
In Upper Eocene: Jackson Group: Ocala Limestone: Limestone: white to cream to light-brown (latter at dep	th).	
much calcitized and crystalline, fossiliferous at certain le (bryozoan remains and Foraminifera)	evels	270
Gypsina globula at 115.		
Amphistegina pinarensis var. at 169. Lepidocyclina sp. common at 195.		
No samples		290

WELL	Logs	0F	THE	COASTAL	Plain	$\mathbf{0F}$	GEORGIA
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	Thickness (feet)	Depth (feet)
In Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: white to light-gray, somewhat nodular, dense, massive, coarsely glauconitic, fossiliferous (macroshells and bryozoan remains)	16	306
Dolomitic limestone: light-gray, saccharoidal, glauconitic	21	327
Limestone: light-gray to white, massive, coarsely glauconitic, sandy, fossiliferous (bryozoan remains and some Foramini- fera)	26	353
Limestone: gray, dense, crystalline, cherty, glauconitic (finely disseminated grains)	47	400
Marl: pale-yellowish-green, somewhat indurated and tough, softer at depth, somewhat granular, glauconitic (finely dis- seminated grains), micaceous, fossiliferous (some Foramini- fera at certain levels)	30	430
Cibicides westi at 400.		
Limestone: cream, calcitized and granular, loosely consoli- dated, fossiliferous (a coquina and some Foraminifera)		435
Limestone: yellowish-green, argillaceous, dense, sandy, coarse- ly glauconitic, fossiliferous (fragments, casts and molds of megafossils); interbedded marl, yellowish-green, silty, fos- siliferous (Foraminifera at certain levels)	33	468
Asterigerina lisbonensis at 458.		
Sand: somewhat indurated at certain levels, fine to coarse- grained, subangular, coarsely glauconitic, fossiliferous (macroshells, bryozoan remains, Ostracods, and Foramini- fera at certain levels)	18	486
Eponides mexicanus, Gyroidina soldanii var., Alabamina atlantisae, Discorbis yeguaensis, Cibicides americanus var.,		
Cibicides danvillensis, Cibicides pseudoungerianus var., Ci- bicides lobatulus, Asterigerina lisbonensis at 476.		
Limestone: gray to cream, rather massive, sandy, coarsely glauconitic, fossiliferous (a coquina)		495
Tallahatta Formation:		
Sand: fine to coarse-grained, subangular; interbedded clay, dark-green to mottled, sandy, micaceous		1,035
Glauconite very abundant at 495.		

	Thickness (feet)	Deptl. (feet)
Summary:		
Residuum		55
No samples		115
In upper Eocene (Ocala limestone)	155	270
No samples		290
In middle Eocene (Lisbon formation)		495
In middle Eocene (Tallahatta formation)	540	1,035

### **Potential Water-Bearing Zones:**

Limestone	155	270
Sand: fine to coarse-grained	<b>540</b>	1,035

#### **Remarks:**

It is thought that by careful drilling plus the aid of an electric log, adequate water-bearing sands can be found within the Tallahatta formation (see log above).

### DECATUR COUNTY

Location: Center of northeast quarter of Land Lot 260, 21st Land District Owner: No. 1 Metcalf	Well No.: GGS 168 Elev.: 104 (derrick floor)
Driller: Hunt Oil Company Drilled: August 1944	(deffice filos)
	Thickness Depth (feet) (feet)

No samples	138	138
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### In Upper Eocene: Jackson Group: Ocala Limestone:

Dolomitic limestone: light-brown, saccharoidal, fossiliferous		
(some Foraminifera)	207	345
Operculinoides sp., Gypsina globula, Amphistegina pinaren-		

sis var. at 265-275.

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

Limestone: cream to light-brown, rather massive and crystal- line, somewhat nodular, fossiliferous (bryozoan and mollus- can remains and some Foraminifera)	10	355
Limestone: cream, calcitized and granular, somewhat loosely consolidated, coarsely but sparsely glauconitic, fossiliferous at certain levels (macroshells, echinoid and bryozoan re-		

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		<b>15</b> 3
	Thickness (feet)	Depth (feet)
mains, and Foraminifera); interbedded dolomitic limestone, gray to brown, saccharoidal, glauconitic; indurated sand, fine to medium-grained, subangular		810
Tallahatta Formation:		
Indurated sand: fine to medium-grained, subangular, abun- dantly glauconitic at depth; interbedded clay, brown, some- what fissile	310	1,120
Sand: coarse-grained, subangular		1,200
- Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, micaceous, fossiliferous at depth (some Foraminifera); interbedded sand, light-gray, fine-grained, subangular, glauconitic (finely disseminated grains), mica- ceous	320	1,520
Robulus sp., Alabamina sp., Globigerina sp. at 1290-1300. Marginulina sp. at 1330-1340.		
Paleocene: Midway Group: Clayton Formation:		
Limestone: somewhat yellow, dense, crystalline, coarsely glau- conitic, fossiliferous (some "larger Foraminifera")	25	1,545
Pseudophragmina stephensoni at 1540-1550.		
Indurated sand: fine-grained, glauconitic (finely dissemi- nated); interbedded limestone, gray, crystalline, sandy, fossiliferous (Foraminifera at certain levels)	195	1,740
Robulus pseudo-mamilligerus at 1600-1610.		
Marl: gray, somewhat indurated, silty, micaceous, glauconitic, fossiliferous (Foraminifera <sup>1</sup> )	295	2,035
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Marl: gray, chalky, micaceous, glauconitic, sandy at certain levels, fossiliferous (fossils at certain horizons)	770	2,805
Globotruncana cretacea at 2050-2060.		
Planulina taylorensis at 2210-2220.		
Kyphopyxa christneri at 2620-2630.		
Vaginulina texana at 2650-2660.		

<sup>&</sup>lt;sup>1</sup>Tamesi fauna.

	Thickness (feet)	Depth (feet)
Sand: fine to medium-grained, somewhat indurated, glaucon- nitic (finely disseminated), phosphatic, fossiliferous (a co- quina)	115	2,920
Tuscaloosa Formation:		
Sand: medium-grained, angular, somewhat indurated, glau- conitic, fossiliferous (macroshells); interbedded shale, gray, fissile, carbonaceous, micaceous	295	3,215
Shale: dark-gray, fissile, carbonaceous, micaceous	265	3,480
Sand: medium-grained, angular, glauconitic, fossiliferous (macroshells); interbedded shale, as above		3,570
Sand: coarse-grained, angular, arkosic; interbedded clay, red, micaceous, sandy	40	3,6101

### Summary:

No samples	138	138
In upper Eocene (Ocala limestone)	207	345
In middle Eocene (Lisbon formation)	465	810
Middle Eocene (Tallahatta formation)	390	1,200
Lower Eocene (Wilcox group, undifferentiated)	320	1,520
Paleocene (Clayton formation)	515	2,035
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	885	2,920
Upper Cretaceous (Tuscaloosa formation)	690	3,610

### **Potential Water-Bearing Zones:**

Limestone	200	545
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### Remarks:

This is a difficult area in which to find suitable aquifers. In general, most aquifers available below a depth of 545 contained mineralized ground water.

<sup>1.54</sup> 

<sup>&</sup>lt;sup>1</sup>Not examined below 3,610.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

**7**0 -

### DECATUR COUNTY

Driller: Layne-Atlantic Company	City of Bainbridge Elev.: 135 <sup>1</sup> Layne-Atlantic Company		228
Drilled: May 1951		Thickness (feet)	Depth (feet)
Residuum:			
Clay: bluish-gray to tan to purple to red (mottled), sandy, limonitic, residual limestone at depth		75	75
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: brown with some cream, dense, crystalline, r calcitized, somewhat dolomitized, fossiliferous (echinoid bryozoan remains and Foraminifera)	and		150
Operculinoides sp. at 75-79.			
Operculina cf. O. mariannensis, Asterocyclina sp., Gyp globula at 79-97.	osina		
Limestone: cream, considerably calcitized, rather massive, siliferous (Foraminifera); interbedded dolomitic limes light-brown, saccharoidal	tone,		220
Amphistegina pinarensis var. at 185-190.			
Limestone: as above, but somewhat more porous		130	350
In Middle Eocene: Claiborne Group: Lisbon Formation:			
Limestone: light-gray, massive, nodular, pyritiferous, for iferous (bryozoan remains and some Foraminifera)			405
Lepidocyclina sp. at 350-355.			
Asterocyclina sp. at 385-390.			
Limestone: light-gray, much calcitized, saccharoidal, coa but sparsely glauconitic, fossiliferous (some Foraminif		10	415
Limestone: cream, much calcitized, granular, porous, coa: glauconitic, fossiliferous (echinoid and bryozoan rem and Foraminifera)	ains,		445
Asterocyclina sp. at 415-420.			

<sup>1</sup>Average elevation taken from State Highway map.

	Thickness (feet)	Depth (feet)
Summary:		
	75	
Residuum Upper Eocene (Ocala limestone)		75 350
In middle Eocene (Lisbon formation)		445
		-10
Potential Water-Bearing Zones:		
Limestone	225	445
DC	DGE COU	NTY
Location: Near Eastman We	ell No.: GG	S 222
	ev.: 355	~
	Thickness (feet)	Depth (feet)
No samples	159	159
No samples Oligocene (Undifferentiated):	159	159
-		
Oligocene (Undifferentiated): Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular,	91	250
Oligocene (Undifferentiated): Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains) Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Fora-	91	159 250 370
<ul> <li>Oligocene (Undifferentiated):</li> <li>Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains)</li> <li>Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Foraminifera)</li> </ul>	91	250
<ul> <li>Oligocene (Undifferentiated):</li> <li>Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains)</li> <li>Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Foraminifera)</li> <li>Lepidocyclina sp. common, Rotalia mexicana var. at 250-260.</li> </ul>	91 120	250 370
<ul> <li>Oligocene (Undifferentiated):</li> <li>Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains)</li> <li>Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Foraminifera)</li> <li>Lepidocyclina sp. common, Rotalia mexicana var. at 250-260.</li> <li>Upper Eocene: Jackson Group: Ocala Limestone:</li> </ul>	91 120	250 370
<ul> <li>Oligocene (Undifferentiated):</li> <li>Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains)</li> <li>Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Foraminifera)</li> <li>Lepidocyclina sp. common, Rotalia mexicana var. at 250-260.</li> <li>Upper Eocene: Jackson Group: Ocala Limestone:</li> <li>Limestone: as above, abundant Foraminifera</li> </ul>	91 120 75	250 370 445
Oligocene (Undifferentiated): Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains) Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Fora- minifera) Lepidocyclina sp. common, Rotalia mexicana var. at 250-260. Upper Eocene: Jackson Group: Ocala Limestone: Limestone: as above, abundant Foraminifera Summary: No samples Oligocene (undifferentiated)	91 	250 370 445 159 370
Oligocene (Undifferentiated): Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains) Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Fora- minifera) Lepidocyclina sp. common, Rotalia mexicana var. at 250-260. Upper Eocene: Jackson Group: Ocala Limestone: Limestone: as above, abundant Foraminifera Summary: No samples	91 	250 370 445 159 370
Oligocene (Undifferentiated): Limestone: light-gray, dense, highly calcitized and crystalline, cherty; limestone, white to cream, soft, somewhat nodular, fossiliferous (bryozoan remains) Limestone: white to cream, nodular, somewhat calcitized and crystalline, fossiliferous (bryozoan remains and some Fora- minifera) Lepidocyclina sp. common, Rotalia mexicana var. at 250-260. Upper Eocene: Jackson Group: Ocala Limestone: Limestone: as above, abundant Foraminifera Summary: No samples Oligocene (undifferentiated)	91 	250

Depth

(feet)

Thickness

(feet)

DODGE COUNTY Location: 5 mi. south of Dubois, 4.5 mi. northwest of East- Well No.: GGS 233 man, 0.93 mi. west of Dodge Hollow School at dwelling Elev.: 347

### Miocene (Undifferentiated):

Owner: No. 1 Lyman Jones Driller: H. B. Truluck Drilled: August 1951

Clay: mottled, sandy, limonitic	40	40
Sand: fine to coarse-grained, angular	30	70
Clay: brown, sandy, with fragments of residual limestone	10	80

#### Oligocene (Undifferentiated):

siliferous (some bryozoan remains, and Foraminifera)	Limestone:	white,	dense, cry	stalline, s	acch	aroidal, cherty, fos-		
	siliferous	(some	bryozoan	remains,	and	Foraminifera)	60	140

Rotalia mexicana var., Gypsina globula<sup>1</sup> at 100-110.

#### Summary:

Miocene (undifferentiated)	80	80
Oligocene (undifferentiated)	60	140

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	20	70
Limestone	60	<b>140</b>

#### DODGE COUNTY

Location: 2 mi. east of Dubois, north side of county road,	Well No.: GGS 240
0.1 mi. east of road junction	Elev.: 357
Owner: No. 1 Sheldon Steel	
Driller: H. B. Truluck	
	Thickness Depth (feet) (feet)

#### Miocene (Undifferentiated):

Clay: gray to red (mottled), sandy, limonitic	40	40
Sand: medium-grained, angular	20	60
Clay: white to gray, sandy	30	90
Clay: as above, with fragments of residual limestone	10	100

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

### Oligocene (Undifferentiated):

158

Limestone: white, dense, much calcitized, cherty, fossiliferous (bryozoan remains and some Foraminifera)	50	150
Rotalia mexicana var., Asterigerina sp., Siphonina advena at 110-120.		
$Gypsina \ globula^1$ at 120-130.		
Lepidocyclina sp. at 140-150.		

### Summary:

Miocene (undifferentiated)	100	100
Oligocene (undifferentiated)	50	150

## Potential Water-Bearing Zones:

Limestone		50	150
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### DODGE COUNTY

Location: Top of hill, 0.25 mi. east of Southern R.R. cross- ing near Empire Owner: No. 1 H. A. Pierce Driller: H. B. Truluck	Well No.: GGS 267 Elev.: 401	
Drilled: February 1952		
-	Thickness (feet)	Depth (feet)
No samples		10
In Miocene (Undifferentiated):		
Clay: gray to purple (mottled), sandy, limonitic		20
Sand: fine to coarse-grained, angular		30
Clay: light-gray, sandy		40
Sand: coarse-grained, arkosic	20	60
Clay: gray, sandy	20	80
Sand: coarse-grained, arkosic		100
Clay: yellowish-green to red (mottled); interbedded sa fine to coarse grained, angular		170

#### Summary:

No samples	10	10
In Miocene (undifferentiated)	160	170

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

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

7

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	20	60
Sand: fine to coarse-grained	<b>20</b>	100
Sand: fine to coarse-grained	10	130
Sand: fine to coarse-grained	<b>10</b>	170

### DODGE COUNTY

wner: No. 1 M. L. Sapp Elev.: 308 riller: H. B. Truluck		o.: GGS 269 308	
Drilled: February 1952	Thickness (feet)	Depth (feet)	
Miocene (Undifferentiated):			
Clay: gray to red (mottled), sandy, limonitic		50	
Sand: fine to coarse-grained, cherty		80	
No samples		90	
In Oligocene (Undifferentiated):			
Limestone: white, dense, cherty, fossiliferous (bryozoan mains and some Foraminifera)		140	
Asterigerina subacuta at 110-120.			
Rotalia mexicana var. at 120-130.			
Summary:			
Miocene (undifferentiated)		80	
No samples		90	

In Oligocene	(undifferentiated)	. 50	

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	30	80
Limestone	<b>50</b>	140

# DODCE COUNTY

	DODGE COU	NTY
<ul> <li>Location: Approximately 4 mi. west of Eastman, south side U.S. Highway 341, near log cabin</li> <li>Owner: No. 1 Eugene Smith</li> <li>Driller: H. B. Truluck</li> <li>Drilled: February 1952</li> </ul>	Well No.: GG Elev.: 380	S 273
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: bluish-gray to red to brown to purple (mottled), san limonitic	• /	60
Sand: medium-grained, angular, arkosic	20	80
Clay: as above, with fragments of residual limestone		110
Oligocene (Undifferentiated):		
Limestone: yellow, much leached and iron-stained, cherty		140
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, soft and porous, fossiliferous (macroshe echinoid and abundant bryozoan remains, and Foraminife	•	16 <b>0</b>
Gypsina globula, Asterocyclina sp., Lepidocyclina sp., Epo des jacksonensis, Reussella eocena at 140-150.	ni-	
No samples		180
Limestone: white, crystalline, highly calcitized, fossilifer (echinoid and bryozoan remains and some Foraminifera)		190
Summary:		
Miocene (undifferentiated)		110
Oligocene (undifferentiated)		140
Upper Eocene (Ocala limestone)	50	190
Potential Water-Bearing Zones:		
Limestone		190

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

с<sup>с</sup>.

### DOOLY COUNTY

<ul> <li>Location: Northeastern part of city, few ft. west of ele- vated water (steel) reservoir, top of prominent hill, in</li> <li>Well Elev.:</li> <li>Vienna</li> <li>Owner: No. 2 City of Vienna</li> <li>Driller: Layne-Atlantic Company</li> <li>Drilled: March 1947</li> </ul>	No.: GG 397	S 143
	hickness (feet)	Depth (feet)
Residuum :		
Clay: yellowish-green to brick-red (mottled), sandy, limonitic	61	61
Clay: tan to dark-brown to purple (mottled), sandy, and fragments of residual limestone	19	80
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, somewhat crystalline and saccharoidal, coarsely but sparsely glauconitic, fossiliferous (macroshells, echinoid and bryozoan remains, and some Foraminifera)	37	117
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: dark-green, somewhat indurated, silty, glauconitic, fos- siliferous (echinoid and bryozoan remains and some Fora- minifera)	21	138
Textularia adalta, Nonion inexcavatus, Nonion advena, Valvulineria jacksonensis, Cibicides mississippiensis, Cibi- cides americanus var., Cibicides lobatulus at 117-138.		
Limestone: cream, coarsely but sparsely glauconitic, sandier with increased depth, fossiliferous (macroshells abundant bryozoan remains, and some Foraminifera)	46	184
Bryozoan remains abundant at 138-158.		
Marl: dark-green to light-gray, silty, glauconitic (finely dis- seminated grains), fossiliferous (echinoid and bryozoan remains and Foraminifera); interbedded limestone, white, rather massive and dense, very sandy, coarsely glauco- nitic, fossiliferous (casts and molds of megafossils)	61	245
Cibicides westi at 184-189.		

Cibicides pseudoungerianus var. lisbonensis at 230-245.

	Thickness (feet)	Depth (feet)
Tallahatta Formation:		
Sand: fine to coarse-grained, subangular, phosphatic, fossil- iferous (common to abundant macroshells at certain levels).	173	418
Buhrstone: gray to dark-brown, dense, cherty	17	435
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, carbonaceous, micaceous, pyritiferous, fossiliferous (Foraminifera); limestone, gray, very dense, crystalline, sandy, glauconitic	70	505
Eponides dorfi, Cibicides howelli, Anomalina sp. at 435-505.		
In Paleocene: Midway Group: Clayton Formation:		
Clay: light-gray to white, blocky, micaceous; limestone, light- gray, dense, crystalline, sandy, coarsely glauconitic, fos- siliferous (fragments and casts of megafossils and some bryozoan remains); clay, black, fissile, carbonaceous, mi- caceous	40	545
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, subangular; inclusions of kaolin, light-gray, blocky, greasy appearance, micaceous	120	665
Marl: dark, bluish-gray, micaceous, pyritiferous, sandy, fos- siliferous (some Foraminifera)	138	803
Anomalina sp. at 665-677. Anomalina pseudopapillosa at 677-712.		
Summary:		
Residuum	80	80
Upper Eocene (Ocala limestone)		117
Middle Eocene (Lisbon formation)		245
Middle Eocene (Tallahatta formation)		435
Lower Eocene (Wilcox group, undifferentiated)		505 545
In Paleocene (Clayton formation)		545 803
Upper Cretaceous (Providence sand)	498	000

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	173	418
Sand: fine to coarse-grained	120	665

### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

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	DOOLY (	cou	NTY
Location: Approximately 3.4 mi. west of Pinehurst and 1.25 mi. northeast of Forest Chapel Owner: No. 1 Dan Thompson Driller: H. B. Truluck Drilled: September 1951	_		S 241
Dimed. September 1991	Thickr (feel		Depth (feet)
Residuum :			
Clay: olive-green to red (mottled) to tan to dark-brow purple at depth, cherty, sandy, limonitic, and fragm of residual limestone	ents	0	70
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: cream, much calcitized, coarsely glauconitic certain levels, fossiliferous (macroshells, Ostracods, Foraminifera)	and	0	100
Sand: fine to coarse-grained, angular		D	130
Summary:			
Residuum		0	70
Upper Eocene (Ocala limestone)		0	130
Potential Water-Bearing Zones:			
Limestone		0	100
Sand: fine to coarse-grained		)	130
Remarks:			
Additional aquifers occur at depths below 130.			
	DOOLY (	coui	NTY
<ul> <li>Location: 75 ft. east of Highway 41, 30 ft. south of dwelling in Richwood</li> <li>Owner: No. 1 J. M. Diffee</li> <li>Driller: H. B. Truluck</li> <li>Drilled: October 1951</li> </ul>	Well No.: Elev.: 323	3	
	Thickn	less	Depth

	(feet)	(feet)
Residuum :		
Clay: bluish-gray to brick-red, very sandy, limonitic	40	40
Clay: as above, with fragments of residual limestone	20	60

164	Georgia Geological Survey Bulletin 70		
T. D. D.	La la contra de la Limertener	Thickness (feet)	Depth (feet)
	: Jackson Group: Ocala Limestone:		
ous (frag	cream, much calcitized, rather massive, fossilifer- ments, casts and molds of megafossils, echinoid oan remains, and some Foraminifera)	40	100
Lepidocyc	<i>lina</i> sp. at 90-100.		
	Summary:		
			60
Upper Eocene	(Ocala limestone)	40	100
and a second sec	Potential Water-Bearing Zones:		
Limestone		40	100
	Remarks:		
Additional aqu	uifers occur below depth 100.		
	DC	OOLY COU	NTY
Location: 1.5 Owner: No. 1 Driller: H. B.	G. A. Lewis Ele	ell No.: GG ev.: 447	S 257
Driller; n. b.	. 1 ruluck	Thickness (feet)	Depth (feet)
Residuum :			
Residuum:			
Clay: bluis	h-gray to brick-red to purple, sandy, limonitic, nents of residual limestone		30
Clay: bluis and fragr			30
Clay: bluis and fragr Oligocene (Un Limestone:	nents of residual limestone	, 30	30 50

Quinqueloculina sp. at 40-50.

### Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: white, much calcitized, somewhat saccharoidal,		
coarsely but sparsely glauconitic, fossiliferous (fragments		
of macroshells, echinoid and bryozoan remains, and some		_
Ostracods and Foraminifera)	10	70

### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Summary:		
Residuum	30	30
Oligocene (undifferentiated)	30	60
Upper Eocene (Ocala limestone)	10	70
Potential Water-Bearing Zones:		
Limestone and sand	40	70
<b>Domontra</b> .		

Remarks:

Additional aquifers occur below depth 70.

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	DOOLY COU	NTY
Location: 10 mi. east of Vienna and 1.25 mi. north of Highway 27 Owner: No. 1 Carl Lupo Driller: H. B. Truluck	Well No.: GO Elev.: 360	S 258
Drilled: January 1952	Thickness (feet)	Depth (feet)
Residuum :		
Clay: bluish-gray to brick-red to purple, very sandy, limor	nitic 30	30
Oligocene (Undifferentiated):		
Limestone: yellow, much iron-stained, somewhat node dense, crystalline, highly calcitized, rather massive, che fossiliferous (some bryozoan remains and Foraminifera	erty,	70
Rotalia mexicana var., Quinqueloculina sp. at 40-50.		
Limestone: white, dense, crystalline, saccharoidal, fossili ous (macroshells, echinoid and bryozoan remains, and s Foraminifera)	ome	90
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, rather porous, considerably calcit coarsely glauconitic at depth, fossiliferous (echinoid abundant bryozoan remains and Foraminifera)	and	200
Lepidocyclina sp., Gypsina globula at 90-100. Robulus alato-limbatus, Siphonina jacksonensis, Epon jacksonensis, Uvigerina jacksonensis, Cibicides lobatulu 110-120.		

Operculinoides sp. at 170-180.

Asterocyclina sp. at 180-190.

	Thickness (feet)	Depth (feet)
Indurated sand: fine to coarse-grained, angular		210
Summary:		
Residuum		30
Oligocene (undifferentiated)		90
Upper Eocene (Ocala limestone)		210
Potential Water-Bearing Zones:		
Limestone	110	200
	DOOLY COU	JNTY
Location: 1.25 miles west of Sugar Hill School, south side of Unadilla Road Owner: No. 1 D. J. Folds Driller: H. B. Truluck Drilled: May 1952	Well No.: G Elev.: 357	GS 306
	Thickness (feet)	Depth (feet)
Residuum :		
Clay: bluish-gray to brick-red to tan to purple (mottl sandy, limonitic		50
Oligocene (Undifferentiated):		
Limestone: white, nodular, cherty, fossiliferous (echinoid bryozoan remains and some Foraminifera)		80
Quinqueloculina sp. at 50-60. Rotalia mexicana var. at 60-70.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, nodular, much calcitized, somewhat crys line, fossiliferous (macroshells, abundant echinoid and b zoan remains, and some Foraminifera)	ryo-	100
Eponides jacksonensis common at 80-90.		
Limestone: light-gray, dense, massive, coarsely but spar glauconitic, sandy, fossiliferous (casts and molds of m fossils, echinoid and bryozoan remains, Ostracods, Foraminifera)	ega- and	110
Marl: gray, sandy, glauconitic, fossiliferous (abundant (	echi-	
noid and bryozoan remains and some Foraminifera)		130

Well	LOGS	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA

	Thickness (feet)	Depth (feet)
Limestone: white, dense, crystalline, highly calcitized fossili- ferous (macroshells, abundant echinoid and bryozoan re- mains, Ostracods and Foraminifera) <i>Operculinoides</i> sp. at 140-150.	20	150
<ul> <li>Limestone: cream, rather soft and porous but very dense and calcitized at depth, coarsely but sparsely glauconitic, fossiliferous (macroshells, abundant echinoid and bryozoan remains, Ostracods, and abundant "larger Foraminifera").</li> <li>Asterocyclina sp., Lepidocyclina ocalana at 150-160.</li> <li>Operculina mariannensis, Camerina striatoreticulata at 160-170.</li> </ul>	20	170
Sand: fine to coarse-grained, angular	10	180
Summary:		
Residuum		50
Oligocene (undifferentiated)		80
Upper Eocene (Ocala limestone)	100	180
Potential Water Bearing Zones		

### **Potential Water-Bearing Zones:**

Limestone	90	170
Sand: fine to coarse-grained	10	180

Location:9 mi. ESE of Vienna, 811 ft. north and 1,003 ft. east of Land Lot 163, 6th Land District Owner: No. 1 H. E. Walton Driller: Georgia-Florida Drilling Company	Well No.: GGS 6 Elev.: 442	319
Drilled: April 1960		epth eet)

# Miocene (Undifferentiated):

**F**\*\*

Clay: pale-greenish to brownish-gray with tan to red streaks (somewhat mottled), blocky, sandy; interbedded limestone		
at depth, cream, dense, sandy, somewhat cherty	110	110
No samples	530	640

DOOLY COUNTY

	Thickness (feet)	Deptl (feet)
In Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: medium to coarse-grained, subangular, phosphatic at depth; some clay (or kaolin?), light-gray, sandy, micaceous	60	700
Sand: as above; much clay, dark-gray, silty, abundantly glauconitic, micaceous, pyritiferous		724
Paleocene: Midway Group: Clayton Formation:		
Clay: dark-gray, laminated, silty, micaceous, carbonaceous; interbedded limestone, light-gray, sandy, pyritiferous, glau- conitic, fossiliferous (macroshells and bryozoan remains)	30	754
Limestone: light-gray, dense, sandy, glauconitic, pyritiferous, fossiliferous (some macroshells)	- 56	810
Limestone: as above but sandier with depth	- 17	827
Upper Cretaceous: Post-Eutaw (Undifferentiated):		
Sand: coarse-grained, subangular		908
Sand: fine to coarse-grained, subangular; interbedded marl, dark-bluish-gray, somewhat chalky, micaceous, pyritiferous, fossiliferous at certain levels (some macroshells, Ostra- cods and Foraminifera)	297	1,205
Anomalina pseudopapillosa at 900-910.		
Gaudryina rudita, Robulus munsteri, Loxostoma plaitum, Cibicides harperi, Anomalina clementiana at 1135-1145.		
Clay: dark-brownish-gray, laminated, silty, micaceous, lig- nitic, fossiliferous at certain levels (some macroshells, Ostracods and Foraminifera); interbedded sand, fine to coarse-grained, subangular, phosphatic	670	1,875
Planulina taylorensis at 1215-1225.		
Kyphopyxa christneri at 1775-1785.		
Sand: medium to coarse-grained, subangular; interbedded clay, as above	128	2,003
Clay: dark-brown, laminated, silty, micaceous, glauconitic, fossiliferous at certain levels (some macroshells, Ostracods and Foraminifera); interbedded sand, fine to medium- grained, subangular, phosphatic	135	2,138
Vaginulina texana at 2025-2035.		

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L .	169
	Thickness (feet)	Depth (feet)
Eutaw Formation (Restricted):		
Sand: fine-grained, somewhat indurated at certain levels, micaceous, phosphatic, glauconitic, fossiliferous (macro- shells and some fish teeth)		2,210
In Tuscaloosa Formation:		
Sand: fine to coarse-grained, coarser-grained with depth, subangular, micaceous, arkosic; interbedded clay, red to purple, sandy, micaceous	742	2,952
Lower Cretaceous(?) (Undifferentiated):		
Sand: coarse-grained, subangular to subrounded, vari-colored, arkosic, micaceous; interbedded clay, pale-bluish-green to tan to red to purple (mottled), blocky, greasy-appearing, somewhat sandy, abundantly micaceous	560	3,512
Basement Complex (Undifferentiated):		
Crystalline Rock: dark-gray to red at depth, abundantly micaceous, grains of pale-green epidote and other meta- morphic minerals	236	3,748

### Summary:

Miocene (undifferentiated)	110	110
No samples	530	640
In lower Eocene (Wilcox group, undifferentiated)	84	724
Paleocene (Clayton formation)	103	827
Upper Cretaceous (post-Eutaw, undifferentiated)	1,311	2,138
Upper Cretaceous (Eutaw formation, restricted)	72	2,210
Upper Cretaceous (Tuscaloosa formation)	742	2,952
Lower Cretaceous(?) (undifferentiated)	560	3,512
Basement complex (undifferentiated)	236	3,748

## Potential Water-Bearing Zones:

Limestone	<b>56</b>	810
Sand: fine to coarse-grained	78	905
Sand: fine to coarse-grained	30	1,125
Sand: fine to coarse-grained	40	1,380
Sand: fine to coarse-grained	128	2,003
Sand: fine to coarse-grained	387	<b>2,</b> 952 <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>There is a possibility that these sands may contain salt water, hence be unsuitable for human consumption.

# DOUGHERTY COUNTY

Owner: No. 1 Reynolds Bros. Lumber Company Driller: J. K. Sealy et al	Well No.: GGS 11 Elev.: 197	
Drilled: 1942	Thickness (feet)	Depth (feet)
No samples		280
In Middle Eocene: Claiborne Group: Tallahatta Formati	on:	
Sand: fine to medium-grained, angular, phosphatic		409
No samples		432
Sand: as above; marl, gray, silty, micaceous, glauconi siliferous (some Foraminifera)		465
Valvulineria jacksonensis var., Alabamina sp. at 432	2-465.	
Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: as above; marl, gray to darker-gray at depth ceous, carbonaceous, fossiliferous at certain levels minifera)	(Fora-	494
Globorotalia wilcoxensis at 465-494.		
Sand: fine-grained, angular, abundantly glauconitic		524
Clay: light-gray, somewhat fissile; sand, as above		558
No samples		575
In Paleocene: Midway Group: Clayton Formation:		
Limestone: white, crystalline, coarsely glauconitic, sar durated sand at depth, fine-grained, dense, gla (finely disseminated)	uconitic	590
Indurated sand: fine-grained, rather dense, glauconitic bedded marl, dark-gray to black, fissile, carbor micaceous	naceous,	615
Operculinoides catenula common, Robulus midwo Robulus degolyeri at 585-623.		
Limestone: light-gray, dense, crystalline, sandy to very in its lower part, glauconitic, fossiliferous (macr	oshells,	750
bryozoan remains, and some Foraminifera)		750
Sand: fine to coarse-grained, angular		110

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

Thickness Depth (feet) (feet)

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

Marl: gray, somewhat chalky, micaceous, glauconitic, pyriti- ferous, fossiliferous (megafossils, Ostracods, and Fora- minifera)	_ 20	790
Gaudryina rudita, Anomalina pseudopapillosa at 770-790.		
Indurated sand: fine to coarse-grained, angular, fossilifer- ous (a coquina)	_ 25	815
Sand: fine to coarse-grained, angular; interbedded marl, as above	255	1,070
Cibicides harperi, Textularia ripleyensis at 925-955. Globotruncana cretacea, Dorothia sp. at 955-985.		
Marl: as above	30	1,100
Cusseta and Blufftown Formations (Undifferentiated):		
Marl: bluish-gray to brown, somewhat fissile at depth, silty, micaceous, glauconitic, carbonaceous, pyritiferous, abun- dantly fossiliferous at certain levels (megafossils, Ostra- cods and Foraminifera); interbedded sand, fine to coarse- grained, angular, glauconitic, somewhat phosphatic, fos- siliferous (macroshells)	_ 1,170	2,270
Planulina taylorensis at 1105-1135.		
Kyphopyxa christneri, Vaginulina texana at 1585-1615.		
Sand: fine to medium-grained, somewhat indurated, glauco- nitic, micaceous, fossiliferous (macroshells)	- 95	2,365
Eutaw Formation (Restricted):		
Sand: fine to coarse-grained, angular, somewhat indurated, micaceous, phosphatic, glauconitic, fossiliferous (a coquina).	140	2,505
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic, scattered grains of "rose quartz"; interbedded clay, yellowish-green, somewhat iron-stained, micaceous, sandy	315	2,820
Clay or shale: dark-gray to black, carbonaceous (finely dis- seminated), fossiliferous at certain levels (casts of mega- fossils); interbedded sand, fine to coarse-grained, angular,		
glauconitic	100	2,920

	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		3,3001

## Summary:

No samples	280	280
In middle Eocene (Tallahatta formation)		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

<ul><li>Location: 3.5 mi. west of Dougherty-Worth County line and 0.5 mi. south of Atlantic Coast Line R.R.</li><li>Owner: No. 1 U. S. Marine Corps</li><li>Driller: Layne-Atlantic Company</li><li>Drilled: 1951</li></ul>	Well No.: Elev.: 223		
		Thickness (feet)	Depth (feet)
Residuum:			
Sand: fine to medium-grained, limonitic; clay, mott	led, sandy		20
Clay: gray to brown (mottled), sandy, limonitic, ments of residual limestone	Ç	20	40
No samples		12	52

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

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		173
	Thickness (feet)	Depth (feet)
In Upper Eocene: Jackson Group: Ocala Limestone:		<b>, ,</b>
Limestone: white to cream, dense (much calcitized), sandier and glauconitic at depth, fossiliferous (macroshells, bryo- zoan 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, fossilifer- ous (macroshells at certain levels); interbedded marl, light- gray to cream, somewhat sandy, finely glauconitic, fossili- ferous (bryozoan remains, Ostracods and Foraminifera); thin beds of limestone, light-gray, dense (much calcitized), sandy, finely glauconitic, fossiliferous (some macro- and microfossils)	92	400
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 (abun- dant macroshells); interbedded stringers of limestone, light-gray, sandy, coarsely glauconitic; beds of marl, light- gray to yellowish-green, somewhat fissile, sandy, carbo- naceous, micaceous, fossiliferous (some Foraminifera)	240	640
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	
Cibicides howelli, Cibicides blanpiedi at 656-676. Eponides dorfi, Alabamina wilcoxensis, Cibicides howelli, Globorotalia 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 (macro- shells, bryozoan remains, and some Foraminifera)	. 80	850	
Limestone, light-gray to white, sandy, coarsely glauconitic, macroshells at 770-784.			
Robulus alabamensis, Eponides lotus, Cibicides alleni, Anomalina acuta 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 re- mains, 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	
Anomalina pseudopapillosa at 959-974.			
Sand: fine to coarse-grained, indurated	25	1,025	
Summary:			
Residuum	40	40	
No samples		52	
In upper Eocene (Ocala limestone)		308	
Middle Eocene (Lisbon formation)		400	
Middle Eocene (Tallahatta formation)		640	
Lower Eocene (Wilcox group, undifferentiated)		770	
Paleocene (Clayton formation)		966 1 025	
Upper Cretaceous (Providence and Ripley, undifferentiated)	. 59	1,025	

Thickness	Depth
(feet)	(feet)

## 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	<b>26</b>	966
Sand: fine to coarse-grained, indurated	<b>25</b>	1,025

#### **DOUGHERTY COUNTY**

Location: 5.12 mi. west of Dougherty-Worth County	Well No.: GGS 261	
line and 1 mi. south of Atlantic Coast Line R.R.	Elev.: 204	
Owner: No. 3 U. S. Marine Corps		
Driller: Layne-Atlantic Company		
Drilled: February 1952		
		Depth (feet)

	(feet)	(feet)
No samples	. 20	20
In Residuum:		
Clay: mottled, sandy, limonitic, and fragments of residual limestone	. 20	40
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
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
Cibicides westi at 270-290. Operculinoides sp., Asterocyclina sp., Cibicides pseudounger- ianus var. lisbonensis at 290-310.		

170	GEORGIA GEOEDORIONE SUNTEI DUELEIIN TO		
		Thickness (feet)	Depth (feet)
Tallahatta Forma	ation:		
certain level yellowish-gre bonaceous, f light-gray, d	o coarse-grained, phosphatic, fossiliferous at s (abundant macroshells); interbedded marl, sen, somewhat sandy, micaceous, slightly car- cossiliferous (some Foraminifera); limestone, lense (much calcitized), sandy, coarsely glau- ty at depth, fossiliferous (macroshells)	266	616
Cibicides tall	lahattensis at 473-477.		
	danvillensis var., Valvulineria jacksonensis 28 tallahattensis, Spiroplectammina sp., Discor- 1-493.		
Lower Eocene: W	Vilcox Group (Undifferentiated):		
	own, silty, micaceous, glauconitic, carbonaceous, fossiliferous (Foraminifera at certain levels)	74	69Ó
Anomalina u	mbonifera, Cibicides howelli at 616-620.		
Valvulineria	cf. V. wilcoxensis at 640-660.		
	medium-grained, coarser grained at depth,	30	720
Paleocene: Midwa	ay Group: Clayton Formation:		
indurated at shells and F black, somew	ained, coarser grained with depth, somewhat certain levels, glauconitic, fossiliferous (macro- oraminifera); interbedded marl, dark-gray to what fissile but blocky at certain levels, carbo- ely micaceous, fossiliferous	60	780
Anomalina a	dwayensis, Eponides lotus, Globulina gibba, ccuta, Alabamina wilcoxensis, Gyroidina aequi- vicides alleni at 720-740.		
Operculinoid	es catenula at 740-760.		
	nite, dense (much calcitized), sandy, coarsely fossiliferous (macroshells)	15	795
	ssile, carbonaceous, finely micaceous, fossilifer- oraminifera)	5	800
conitic, fossi	ht-gray, dense (much calcitized), sandy, glau- liferous (fragments and molds of macroshells, nains, Ostracods and some Foraminifera)	98	898
			_
Sand: fine to c	oarse-grained, rather angular	24	922

Thickness Depth (feet) (feet)

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

Sand: fine to medium-grained, pyritiferous; interbedded marl, bluish-gray, silty, micaceous, pyritiferous, fossili- ferous (macroshells, Ostracods, and Foraminifera)	30	952
Anomalina pseudopapillosa, Gaudryina sp. at 921-941.		
Indurated sand: fine to coarse-grained	18	<b>97</b> 0
Sand: fine to medium-grained; interbedded marl, bluish-gray, silty, micaceous, pyritiferous, fossiliferous (macroshells)	30	1,000

#### Summary:

No samples	20	20
In Residuum	20	40
Upper Eocene (Ocala limestone)	<b>200</b>	<b>240</b>
Middle Eocene (Lisbon formation)	110	350
Middle Eocene (Tallahatta formation)	266	616
Lower Eocene (Wilcox group, undifferentiated)	104	720
Paleocene (Clayton formation)	202	922
Upper Cretaceous (Providence and Ripley, undifferentiated)	78	1,000

## **Potential Water-Bearing Zones:**

Limestone	200	240
Sand: fine to coarse-grained	10	250
Sand: fine to coarse-grained	<b>20</b>	350
Sand: fine to coarse-grained	18	383
Sand: fine to coarse-grained	30	470
Sand: fine to coarse-grained	56	550
Sand: fine to coarse-grained	15	720
Limestone	98	898
Sand: fine to coarse-grained	<b>24</b>	922

## **DOUGHERTY COUNTY**

Location: 2.6 mi. west of Dougherty-Worth County	Well No.: GGS 290
line and 0.75 mi. south of Atlantic Coast Line R.R.	Elev.: 258
Owner: No. 2 U.S. Marine Corps	
Driller: Layne-Atlantic Company	
Drilled: March 1952	

Thickness (feet)	De <b>pth</b> (fe <b>et)</b>

## Summary:

Residuum	<b>70</b>	70
Upper Eocene (Ocala limestone)	260	330
Middle Eocene (Lisbon formation)	100	430
Middle Eocene (Tallahatta formation)	<b>240</b>	670
Lower Eocene (Wilcox group, undifferentiated)	150	820
Paleocene (Clayton formation)	217	1,037

## **Potential Water-Bearing Zones:**

Limestone	<b>245</b>	315
Sand: fine to coarse-grained	36	406
Sand: fine to coarse-grained	<b>28</b>	498
Sand: fine to coarse-grained	64	572
Sand: fine to coarse-grained	50	630
Sand: fine to coarse-grained	18	6 <b>68</b>
Limestone	90	1,000
Sand: fine to coarse-grained	18	1,026

## **Remarks:**

Cuttings of extremely poor quality.

## DOUGHERTY COUNTY

Location: In Albany	Well No.: GGS 405
Owner: No. 15 City of Albany	Elev.: 197
Driller: Layne-Atlantic Company	
Drilled: November 1954	
	Thickness Depth (feet) (feet)

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## **Residuum**:

Sand: fine to coarse-grained; some residual limestone, yellow,		
dense (much calcitized), fossiliferous (macroshells, echi-		
noid and bryozoan remains, and Foraminifera)	20	20

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		179
	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, saccharoidal (much calcitized), somewhat sandy, fossiliferous (Foraminifera at certain horizons)	130	150
Camerina striatoreticulata at 50-60.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: white to bluish-gray, granular (in texture), sandier with increased depth, finely phosphatic, sparsely but coarsely glauconitic, fossiliferous (macroshells, abun- dant bryozoan remains, Ostracods, and some Foramini- fera); interbedded marl, light-gray, fossiliferous (bryo- zoan remains and Foraminifera)	35	185
Cibicides pseudoungerianus var. lisbonensis, Cibicides westi at 160-170.		
Asterocyclina monticellensis, Operculinoides sp. at 190-200.		
Limestone: as above, but sandier at depth		210
Tallahatta Formation:		
Sand: fine to coarse-grained; some limestone, as above	. 35	245
Cibicides tallahattensis at 230-240.		
Limestone: bluish-gray, dense (much calcitized), sandy, coarsely but sparsely glauconitic, fossiliferous (abundant coquina and bryozoan remains); interbedded marl, light- gray, fossiliferous (Foraminifera)	75	320
Cibicides tallahattensis, Cibicides blanpiedi at 261-270.		
Sand: fine to coarse-grained, phosphatic; interbedded marl, dark-gray, silty, micaceous, fossiliferous (Foraminifera); limestone, white, crystalline (much calcitized), sandy, coarsely glauconitic, phosphatic, fossiliferous (macroshells)	. 92	412
Marl: dark-brown, fissile, carbonaceous, micaceous, fossilifer- ous (Foraminifera); interbedded sand, fine to coarse- grained, phosphatic	. 28	440
Claystone: dark-gray, dense, somewhat cherty, sandy, abun- dantly glauconitic	. 4	444

	Thickness (feet)	Dep <b>th</b> (feet)
Lower Eocene: Wilcox Group (Undifferentiated):		
Marl: dark-gray, carbonaceous, micaceous, pyritiferous, fos- siliferous (Foraminifera)	4	448
Sand: fine to medium-grained, abundantly glauconitic; inter- bedded marl, dark-gray, carbonaceous, micaceous, pyriti- ferous, fossiliferous	19	467
Valvulineria wilcoxensis, Valvulineria scrobiculata, Epo- nides dorfi, Alabamina wilcoxensis, Siphonina wilcoxensis, Cibicides howelli at 445-450.		
Marl: dark-gray, silty, micaceous, pyritiferous	51	518
Sand: fine to coarse-grained, angular, with grains of pale- green quartz; interbedded marl, dark-gray, fissile, mica- ceous, carbonaceous, pyritiferous	52	570
Paleocene: Midway Group: Clayton Formation:		
Limestone: white, dense (much calcitized), sandy, coarsely glauconitic, fossiliferous (casts and molds of macroshells, echinoid and bryozoan remains, and some Foraminifera)	4	574
Operculinoides catenula, Robulus midwayensis at 570-580.		
Sand: fine grained, indurated at certain horizons, finely glau- conitic; interbedded marl, black, fissile, micaceous, carbo- naceous, fossiliferous (some Foraminifera)	24	598
Limestone: light-gray, crystalline (much calcitized), sandy, coarsely glauconitic, pyritiferous, fossiliferous (fragments and molds of macroshells, bryozoan remains, Ostracods, and Foraminifera)	108	706
Sand: fine to coarse-grained, angular; interbedded marl, light-gray, silty, micaceous; some limestone, as above		736
Upper Cretaceous: Providence and Ripley Formations (Undiffer	entiated):	
Marl: light-gray, silty, chalky, micaceous, pyritiferous, fos- siliferous (macroshells, Ostracods, and Foraminifera); in-	·	
terbedded sand, fine to medium-grained, pyritiferous, mica- ceous	48	784
Anomalina pseudopapillosa at 734-754.		
Limestone: cream, somewhat sandy, fossiliferous (macroshell	s) 29	818

WELL LOGS OF T	THE COASTAL	PLAIN OF	GEORGIA
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	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, pyritiferous, micaceous, inter- bedded marl, gray, silty, chalky, micaceous, pyritiferous	63	876
Marl: bluish-gray, chalky, micaceous, pyritiferous, fossilifer- ous (macroshells, Ostracods, and Foraminifera); inter- bedded sand, fine to medium-grained, pyritiferous, mica- ceous	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	$\frac{130}{35}$	$150 \\ 245$
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 COU	NTY
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.: GG Elev.: 187 (derrick	
	Thickness (feet)	Depth (feet)

## In Paleocene: Midway Group: Clayton Formation:

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

	Thickness (feet)	De <b>pth</b> (fe <b>et)</b>
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, glauco- nitic, sandy, fossiliferous (some macroshells, bryozoan re- mains, 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 macro- shells, bryozoan remains, Ostracods, and Foraminifera); interbedded marl, dark-gray to black, carbonaceous, mica- ceous (finely disseminated)	150	1,095
Marl: gray, somewhat indurated, fissile, carbonaceous, mica- ceous, fossiliferous (Ostracods and Foraminifera); inter- bedded limestone, as above	110	1,2 <b>05</b>
Upper Cretaceous: Post-Eutaw (Undifferentiated):		
Marl: dark, bluish-gray to brown, gray and chalky at depth, silty, micaceous, abundantly glauconitic, carbonaceous, py- ritiferous, 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, glaucon- itic 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		2,840

	Thickness (feet)	Depth (feet)
Sand: as above; interbedded shale, dark-gray to black, fissile, silty, carbonaceous, finely micaceous		2,965
Shale: as above; interbedded sand, fine-grained, micaceous	120	3,085
Indurated sand: fine to medium-grained, subangular, glau- conitic, 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, mica-	10	2 01 5
ceous, 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	<sup>1</sup> 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 <b>3,</b> 376

#### Potential Water-Bearing Zones:

Limestone		150	1,095
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#### 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 "siltedup", 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.

<sup>&</sup>lt;sup>1</sup>Not reported below 3,376. Total depth 7,320 feet.

# EARLY COUNTY

	EARLY COUNTY		NTY		
Location: In Recreation Area, Kolomoki State Park Owner: No. 1 Kolomoki State Park Driller: V. C. Mickle Drilled: 1940	Well No.: GGS 138 Elev.: 272				S 138
		Thickness (feet)	Depth (feet)		
Residuum:					
Clay: bluish-gray to red (mottled), sandy, limonitic; so residual limestone, more abundant with depth		35	35		
Middle Eocene: Claiborne Group: Lisbon Formation:					
Limestone: light-gray, dense, rather massive, crystall sandy, cherty, glauconitic (finely disseminated grains), siliferous (macroshells and some bryozoan remains); terbedded marl, light-gray, silty, micaceous, somew carbonaceous, fossiliferous (some Foraminifera)	fos- in- vhat	75	110		
Cibicides westi at 65-75.					
Tallahatta Formation:					
Sand: fine to medium-grained, subangular, phosphatic; in bedded clay, dark-green, sandy, micaceous		78	188		
Limestone: light-gray, dense, crystalline, massive, san coarsely glauconitic, fossiliferous (fragments and mold Gastropods)	s of	10	198		
Lower Eocene: Wilcox Group (Undifferentiated):					
Clay: dark-brown, silty, carbonaceous, micaceous, pyriti ous, fossiliferous (Foraminifera at depth)		190	388		
Robulus sp., Eponides dorfi, Alabamina wilcoxensis, Va lineria scrobiculata at 218-228.	lvu-				
Sand: fine to medium-grained, subangular, abundantly g conitic	lau-		398		
Paleocene: Midway Group: Clayton Formation:					
Sand: medium to coarse-grained, subangular grains of p green quartz		30	428		

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L	185
	Thickness (feet)	Depth (feet)
Indurated sand: gray, fine-grained, glauconitic (finely dis- seminated grains); interbedded marl, dark-gray to black, fissile, carbonaceous, micaceous, fossiliferous (Foraminifera	) 40	468
Pseudophragmina stephensoni at 438-448. Robulus midwayensis at 448-458.	, ,	
Limestone: light-gray to white at depth, crystalline, much		

	at acpuit, crystannet, math		
calcitized, sandy, fossiliferous	(some macroshells, bryozoan		
remains, and Foraminifera) _		106	574

## Summary:

Residuum	35	35
Middle Eocene (Lisbon formation)	75	110
Middle Eocene (Tallahatta formation)	88	198
Lower Eocene (Wilcox group, undifferentiated)	200	398
Paleocene (Clayton formation)	176	574

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	58	168
Sand: fine to coarse-grained	30	428
Limestone	100	574

## EARLY COUNTY

Location: In Kolomoki State Park Owner: No. 2 Kolomoki State Park Driller: Layne-Atlantic Company Drilled: August 1951	State Park	S 234	
	Т	hickness (feet)	Depth (feet)
1			
Residuum :			
Clay: bluish-gray to red (somewhat mottled), sandy, limoniti	ic	18	18
Sand: coarse-grained, angular, and some residual limestone.		15	33
Middle Eocene: Claiborne Group: Lisbon Formation:			
Limestone: light-gray, dense, rather massive, glauconiti- sandy; interbedded marl, light-gray, silty, micaceous, some what carbonaceous, sandy, fossiliferous (Foraminifera)	e-	32	65
Cioiciaes westi at 45-65.			

	Thickness (feet)	Depth (feet)
Tallahatta Formation:		,
Sand: fine to coarse-grained, angular, phosphatic	80	145
Summary:		
Residuum		33
Middle Eocene (Lisbon formation)		65
Middle Eocene (Tallahatta formation)		145
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		145

E	EARLY COUNTY	
Owner: City of Blakely Elev Driller: Beasely Drilling Company		S 321
Drilled: September 1952	Thickness (feet)	Depth (feet)
No samples	320	320
In Middle Eocene: Claiborne Group: Tallahatta Formation:		
Sand: fine to coarse-grained, subangular, glauconitic, fossil ferous (macroshells and some Foraminifera)		360
Valvulineria jacksonensis var., Valvulineria danvillensi var., Asterigerina lisbonensis, Cibicides tallahattensis a 320-360.		
Limestone: white, dense, nodular, cherty	?	360
No samples	40	400
In Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, carbonaceous, micaceous, fossiliferou (some Foraminifera)		551
Robulus sp., Valvulineria scrobiculata, Siphonina wilcoxer sis at 400-551.	l-	
Sand: fine to coarse-grained, subangular, somewhat indurated at depth, abundantly glauconitic, grains of pale		
green quartz		570
No samples		600

WELL LOGS OF THE COASTAL PLAIN OF GEOR	GIA
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	Thickness (feet)	Depth (feet)
In Paleocene: Midway Group: Clayton Formation:		
Indurated sand: fine to coarse-grained, subangular, rather		
dense and nonporous	?	600
No samples	60	660
Limestone: light-gray, extremely dense and crystalline, sandy, fossiliferous (macroshells, bryozoan remains, and some		
Foraminifera)	?	660

Nodosaria affinis, Robulus midwayensis at 660.

#### Summary:

No samples	320	320
In middle Eocene (Tallahatta formation)	40	360
No samples	40	400
In lower Eocene (Wilcox group, undifferentiated)	170	570
No samples	30	600
In Paleocene (Clayton formation)	60	660

## Potential Water-Bearing Zones:

Limestone occurring below depth of 660.

#### EARLY COUNTY

Thickness (feet) Depth (feet)

Location: 1.2 mi. north of Saffold	Well No.: GGS 351
Owner: No. 1 Jakin Elementary School	Elev.: 201
Driller: E. J. Carlisle	
Drilled: August 1953	

Residuum	-
лехилинт	

Clay: gray to pink to purple (mottled), very sandy, limonitic	45	45
Sand: fine to coarse-grained, subangular, arkosic	30	75
Clay: tan, very sandy, limonitic, with scattered fragments of residual limestone	15	90
Sand: medium to coarse-grained, subangular, arkosic; some clay, as above	45	135

188	GEORGIA GEOLOGICAL SURVEY BULLETIN 70		
		Thickness (feet)	DeptL (feet)
In Middle Eocene	: Claiborne Group: Lisbon Formation:		
glauconitic, s	een, somewhat indurated and tough, coarsely sandy, fossiliferous (small Gastropods, Ostra- raminifera)	105	240
Siphonina cl at 135-150.	aibornensis, Cibicides westi, Asterocyclina sp.		
<i>Lepidocyclino</i> dant at 150-1	a sp., and <i>Operculinoides</i> sp. common to abun- 165.		
-	llow, dense and crystalline, sandy, coarsely fossiliferous (a coquina)	45	285
Tallahatta Forma	tion:		
	grained, subangular clay, tan, sandy; some llow, rather soft and leached, sandy	15	300
dense and so (a buhrston	argillaceous sandstone): dark-green, extremely mewhat crystalline, coarsely glauconitic, cherty e), carbonaceous, fossiliferous (some macro- , gray to tan to pink (mottled), sandy	120	420
	l: fine to medium-grained, subangular, coarse- ic	12	432
coarsely gla	ay, very dense and massive, crystalline, sandy, uconitic, fossiliferous (fragments, casts and ecypods)	20	452
Lower Eocene: V	Vilcox Group (Undifferentiated):		
	medium-grained, subangular, somewhat in- ertain levels, coarsely but abundantly glauconiti	c 50	502
dantly glaue dark-brown,	ay, dense and crystalline, coarsely and abun- conitic, fossiliferous (megafossils); some clay, silty, lignitic, micaceous, pyritiferous, fossili-		
	aminifera at certain levels)		522
Clay: as in ab	ove sample	236	758

	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Indurated sand: fine to medium-grained, subangular, glauco- nitic, fossiliferous (macroshells, Ostracods, and Foramini- fera)	70	828
Macroshells abundant at 768-778.		
Discorbis midwayensis at 768-778.		
Operculinoides catenula common at 788-798.		

Limestone: gray, nodular, sandy, fossiliferous	(some macro-		
shells, bryozoan remains, and Foraminifera	)	22	850

Pseudophragmina stephensoni at 838-850.

#### Summary:

Residuum	135	135
In middle Eocene (Lisbon formation)	150	285
In middle Eocene (Tallahatta formation)	167	452
Lower Eocene (Wilcox group, undifferentiated)	306	758
Paleocene (Clayton formation)	92	850

#### **Potential Water-Bearing Zones:**

Sand: fine to medium-grained	50	502
Indurated sand grading downward into limestone	92	850

#### **Remarks:**

The main body of the Clayton formation proper lies below total depth of this well. For abundant ground-water supplies the well should be drilled deeper into the Clayton formation.

#### EARLY COUNTY

189

Location: 1 mi. south of road intersection in Damascus, east side of Highway 45, between highway and Seaboard Airline R.R. Owner: No. 1 Kestler School Driller: E. J. Carlisle Drilled: August 1953 Thickness Depth (feet)

## **Residuum:**

Clay: bluish-gray to purple to red (mottled), sandy, limonitic,		
residual limestone at depth	85	85

190	Georgia	GEOLOGICAL	SURVEY	BULLETIN 7	0		
					T	hickness (feet)	Depth (feet)
Upper Eocene: Jac	kson Gro	up: Ocala Li	mestone:				
Limestone: yello iferous (macr Foraminifera)	oshells, e		bryozoai	n remains, a	and	46	131
Operculina cf. gina pinarensi		· ·	docyclind	ı sp., Amphis	ste-		
		Sumi	nary:				

Residuum	85	85
Upper Eocene (Ocala limestone)	46	131

## Potential Water-Bearing Zones:

Limestone	21	131
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#### **Remarks:**

Additional aquifers occur below total depth of this well.

# EARLY COUNTY

Location: 7 mi. southeast of Blakely, west side of Highway 27, at dwelling	Well No.: GGS <b>437</b> Elev.: 178
Owner: No. 1 Farmers Gin and Warehouse Company Driller: Layne-Atlantic Company	
Drilled: June 1955	
	Thickness Depth (feet) (feet)

## **Residuum**:

Sand: tan, argillaceous, fine to coarse-grained, subangular, limonitic	4	4
Clay: gray to pink (mottled), very sandy, limonitic	19	23
Clay: gray to tan to dark-brown, with red streaks (somewhat mottled), very sandy, abundantly limonitic, and frag-		
ments of residual limestone	21	44

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		191.
т	hickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: yellow, somewhat nodular, increasingly calcitized and crystalline with depth, fossiliferous (macroshells, bryo- zoan remains, and some Foraminifera)	48	92
Operculina mariannensis, Asterocyclina sp., Gypsina globula at 44-59.		
Camerina striatoreticulata at 70-92.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: dark-gray, dense and crystalline, very sandy, coarsely glauconitic, fossiliferous (macroshells, bryozoan remains, and Foraminifera); dolomitic limestone, light- brown, saccharoidal, carbonaceous; marl, gray, silty, fos- siliferous (Foraminifera)	16	108
Siphonina claibornensis, Cibicides westi at 92-104.		
Sand: somewhat indurated and dense, fine to coarse-grained, subangular, phosphatic	32	140
Clay: dark-green, sandy, fossiliferous (macroshells, bryo- zoan, and Foraminifera)	22	162
Tallahatta Formation:		
Sand: fine to medium-grained, subangular, phosphatic	24	186
Limestone: gray to light-brown, massive, very sandy, glaucon- itic, phosphatic, fossiliferous (a coquina and some bryo- zoan remains)	21	207
Sand: fine to coarse-grained, subangular, phosphatic		302
Clay: yellowish-green, progressively more indurated with depth (a claystone at depth), very sandy, phosphatic,		
fossiliferous (fragments, casts and molds of Gastropods) Sand: fine to medium-grained, subangular, somewhat in-	. 23	325
durated at certain levels, abundantly glauconitic, fossili- ferous (macroshells)	. 19	344
Limestone: gray, coarsely glauconitic, sandy, fossiliferous (macroshells)	. 12	356
Lower Eocene: Wilcox Group (Undifferentiated):		
Marl: dark-gray, sandy, carbonaceous, micaceous, pyritifer- ous, fossiliferous (Foraminifera at certain levels)	192	548
Robulus sp., Marginulina sp., Eponides dorfi, Discorbis sp., Valvulineria scrobiculata, Cibicides howelli, Anomalina sp. at 350-371.		

192	GEORGIA GEOLOGICAL SURVEY BULLETIN 70		
		Thickness (feet)	Depth (feet)
Sand: fine	e to coarse-grained, subangular, glauconitic	_ 24	572
Paleocene: M	lidway Group: Clayton Formation:		
levels, f	to medium-grained, somewhat indurated at certain cossiliferous at depth (macroshells, echinoid and n remains, Ostracods, and Foraminifera)	46	618
	ia affinis, Robulus midwayensis, Eponides lotus, a sp. at 596-617.		
	sand: as above; interbedded clay, gray, silty, car- is, micaceous	45	663
Pseudop	hragmina stephensoni at 617-627.		
Opercula	inoides catenula common at 638-663.		
with inc	: light-gray, rather dense, progressively sandier creased depth, fossiliferous (macroshells, bryozoan , and some Foraminifera)	21	684
	sand: gray, fine-grained, subangular, glauconitic disseminated grains)	30	714
light-gra	e to coarse-grained, subangular; interbedded clay, ay, silty, somewhat indurated, fissile; some indu- nds, as above	158	872
	e to coarse-grained, subangular; interbedded clay, nalky, micaceous	102	974
	sand: fine to coarse-grained, subangular, fossili- (a coquina)	42	1,016
	e to coarse-grained, subangular; interbedded clay, e	. 13	1,029
Upper Creta	ceous: Providence and Ripley Formations (Undiffere	ntiated):	
	e to coarse-grained, subangular; interbedded marl, alky, micaceous, fossiliferous (some Foraminifera)	. 91	1,120

Guembelina sp., Globotruncana cretacea at 1029-1049.

	Thickness (feet)	Depth (feet)
Summary:		
Residuum	- 44	44
Upper Eocene (Ocala limestone)	48	92
Middle Eocene (Lisbon formation)		162
Middle Eocene (Tallahatta formation)	194	356
Lower Eocene (Wilcox group, undifferentiated)	216	572
Paleocene (Clayton formation)	457	1,029
Upper Cretaceous (Providence and Ripley, undifferentiated)		1,120

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	95	302
Sand: fine to coarse-grained	<b>24</b>	572
Limestone	21	684
Sand: fine to coarse-grained	42	<b>1,01</b> 6

## EARLY COUNTY

Location: 1,738 ft. south and 11 ft. west of northeast cor- ner of Land Lot 341, 26th Land District Elev Owner: No. 1 R. V. Ellis Driller: Sun Oil Company		GS 483 x floor)	
	Thickness (feet)	Depth (feet)	
No samples		80	
In Middle Eocene: Claiborne Group: Lisbon Formation:			
Sand: fine to coarse-grained, angular; some marl, gray, si micaceous, fossiliferous (Radiolaria and some Foram fera); limestone, yellow to light-gray at depth, crystall much calcitized, coarsely glauconitic, sandy, fossilifer (megafossils and some Foraminifera)	ini- ine, cous	200	
Sigmoilina sp., Nonion sp., Radiolaria at 80-120.			
Cibicides pseudoungerianus var. lisbonensis, Operculino sp. at 120-160.	ides		
Asterocyclina sp. at 160-200.			
Tallahatta Formation:			
Marl: light-gray, silty, micaceous, fossiliferous (some Fo minifera); limestone, as above		280	
Valvulineria jacksonensis var., Cibicides tallahattensis 200-240.	at		

	Thickness (feet)	Depth (feet)
Limestone: light-gray, extremely dense, sandy, phosphatic, coarsely glauconitic, fossiliferous (fragments and molds of megafossils)	40	320
Lower Eocene: Wilcox Group (Undifferentiated):		
Marl: dark-brown, silty, carbonaceous, micaceous, pyritifer- ous, fossiliferous (some Foraminifera at certain levels)		640
Valvulineria wilcoxensis at 320-360. Eponides dorfi, Valvulineria wilcoxensis at 360-400.		
Sand bed 560-620.		
Paleocene: Midway Group: Clayton Formation:		
Indurated sand: fine-grained, gray, finely glauconitic, fossil- iferous (megafossils, bryozoan remains, Ostracods, and Foraminifera)	80	720
Operculinoides catenula, Asterocyclina sp., Robulus midway- ensis at 680-720.		
Limestone: yellow, gray to white at depth, very dense, crys- talline, sandy, coarsely glauconitic, pyritiferous, fossili- ferous (megafossils, bryozoan remains, and some Fora- minifera)	320	1,040
Marl: light-gray, somewhat indurated, chalky, micaceous, fos- siliferous (Foraminifera <sup>1</sup> )		1,120
Globorotalia sp., Pseudoglandulina sp. at 1040-1080.		
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Marl: gray, chalky, micaceous, pyritiferous, glauconitic, fos- siliferous (common to abundant Foraminifera)	1,200	2,320
Globotruncana cretacea at 1120-1160. Globotruncana cretacea common, Guembelina sp., Loxosto- ma plaitum, Dorothia sp., Bolivinoides decorata at 1160- 1200.		
Planulina texana at 1360-1400.		
Kyphopyxa christneri at 1520-1560.		
Vaginulina texana at 2040-2080.		
Marl: as above, but somewhat sandier	80	2,400
No samples	10	2,410
مداد الرج بالم		

Thickness (feet)	Depth (feet)
40	2,450
290	<b>2,7</b> 40
) 290	3,030
	3,060
115	3,175
	(feet) 40 290 ) 290 30

## Summary:

No samples	80	80
In middle Eocene (Lisbon formation)	120	200
Middle Eocene (Tallahatta formation)		320
Lower Eocene (Wilcox group, undifferentiated)	320	640
Paleocene (Clayton formation)	480	1,120
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	1,330	2,450
Upper Cretaceous (Tuscaloosa formation)	725	3,175

# Potential Water-Bearing Zones:

Sand: fine to medium-grained	60	620
Limestone	280	1,040

## ECHOLS COUNTY

Location: 660 ft. south, 666 ft. east of northwest corner of	Well No.: GGS 189
Land Lot 146, 12th Land District	Elev.: 181
Owner: No. 1 Bennett and Langdale	(derrick floor)
Driller: Humble Oil and Refining Company	
Drilled: May 1949	
	ThicknessDepth(feet)(feet)

No samples	 170

In Miocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: white, calcitized, dense, sandy, sparsely phos- phatic, cherty at certain levels	40	210
Limestone: brown, somewhat dolomitized, much calcitized, rather massive, sandy, sparsely phosphatic	10	220
Limestone: cream, much calcitized, granular, very sandy	20	240
Clay: considerably indurated, bluish-green, sandy		245
Oligocene (Undifferentiated):		
Limestone: cream, much calcitized, dense, rather massive, somewhat nodular, fossiliferous (bryozoan remains and some Foraminifera)	135	380
$Dictyoconus^1$ sp. at 245-250. $Quinqueloculina$ sp., $Dictyoconus^1$ sp. at 250-255.		
Limestone: light-gray, massive, much calcitized, somewhat nodular, fossiliferous (some macroshells, echinoid and bryo- zoan remains, and Foraminifera) <i>Operculinoides</i> sp. at 390-395.	60	440
Upper Eocene: Jackson Group: Ocala Limestone: Limestone: cream, granular, somewhat loosely consolidated, fossiliferous (Foraminifera) Pseudophragmina flintensis at 450-455.		505
No samples		1,300
In Middle Eocene: Claiborne Group (Undifferentiated): Limestone: dark-brown, saccharoidal, somewhat dolomitized, cherty at certain levels; interbedded limestone, cream, cal- citized, granular, rather loosely consolidated, cherty, gypsi- ferous, sparsely glauconitic	450	1,750
Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: fine to medium-grained, subangular, coarsely glauco- nitic, fossiliferous (some Foraminifera)	30	1,780
Asterocyclina sp. at 1770-1780.		
Limestone: cream, somewhat nodular, calcitized, cherty; in- terbedded clay, pale-greenish-gray, silty, micaceous	185	1,96 <b>5</b>

	Thickness (feet)	Depth (fe <b>e</b> t)
Sand: fine to medium-grained, subangular, somewhat indu- rated at certain levels, coarsely glauconitic, pyritiferous		2,000
Limestone: cream, granular, somewhat loosely consolidated, cherty, fossiliferous (some Foraminifera at certain levels)	295	2,295
Asterocyclina sp. common at 2000-2010.		
Paleocene: Midway Group: Clayton Formation:		
Clay: rather dark-greenish-gray, laminated, silty, micaceous		2,345
Limestone: cream to gray, rather dense and calcitized, granu- lar, somewhat loosely consolidated at depth, coarsely glau- conitic, fossiliferous at certain levels (Foraminifera)	115	2,460
Asterocyclina sp. common at 2350-2360.		
Marl: light-gray, silty, micaceous, sparsely fossiliferous (some Foraminifera); interbedded limestone, as above	210	2,670
No samples		3,010
In Upper Cretaceous: Post-Eutaw (Undifferentiated):		
Marl: light-gray, brownish-gray at depth, chalky, micaceous, glauconitic, pyritiferous, fossiliferous (some megafossils, Ostracods, and Foraminifera); interbedded sand at depth, fine-grained, subangular to subrounded, micaceous, glauco- nitic; sand, somewhat indurated at certain levels, sub- angular to subrounded, micaceous, phosphatic, fossiliferous at certain levels (some vertebrate remains such as fish teeth and macroshells)	330	3,340
Kyphopyxa christneri at 3010-3020.		
Vaginulina texana at 3070-3080.		
Eutaw Formation (Restricted):		
Sand: light-gray, fine-grained, subangular to subrounded, phosphatic, micaceous, pyritiferous, fossiliferous at cer- tain levels (fish teeth and abundant macroshells)	70	3,410
Tuscaloosa Formation:		
Clay: pale-green, laminated, micaceous, somewhat sandy; in- terbedded sand, coarse-grained, subangular, micaceous, limonitic	210	3,620

	Thickness (feet)	Depth (feet)
Clay: dark-gray to black, laminated, somewhat fissile, silty, micaceous (finely disseminated flakes imparting a speckled appearance), carbonaceous; interbedded sand, fine-grained, somewhat indurated at certain levels, subangular, very mi- caceous, phosphatic and glauconitic at various levels	110	3,730
Sand: coarse-grained, subrounded, varicolored, arkosic, grains of white to pink feldspar; interbedded clay; yellowish to brownish-green with brick-red to purple streaks (mottled), somewhat blocky, greasy-appearing, very micaceous, sandy	370	4,100²

## Summary:

No samples	170	170
In Miocene (undifferentiated)	75	245
Oligocene (undifferentiated)	195	440
Upper Eocene (Ocala limestone)	65	505
No samples	795	1,300
In middle Eocene (Claiborne group, undifferentiated)	450	1,750
Lower Eocene (Wilcox group, undifferentiated)	545	2,295
Paleocene (Clayton formation)	375	2,670
No samples	<b>340</b>	3,010
In Upper Cretaceous (post-Eutaw, undifferentiated)	330	3,340
Upper Cretaceous (Eutaw formation, restricted)	<b>70</b>	3,410
Upper Cretaceous (Tuscaloosa formation)	690	4,100 <sup>2</sup>

# **Potential Water-Bearing Zones:**

Limestone	260	505
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# EFFINGHAM COUNTY

Location: In Springfield Owner: City of Springfield Driller: Virginia Supply and Well Company Drilled: 1950	Well No.: GGS Elev.: 75	l No.: GGS 211 v.: 75	
Driffed: 1990	Thickne (feet)		
No samples		20	
In Miocene (Undifferentiated): Clay: dark-green, sandy, phosphatic, micaceous		70	

Well Logs of the Coastal Plain of Georgia		199
	nickness (feet)	Depth (feet)
Clay: as above; limestone, white, somewhat saccharoidal, dense, sandy	125	195
Oligocene (Undifferentiated):		
Limestone: cream, nodular, fossiliferous (casts and molds of megafossils, some bryozoan remains, and Foraminifera)	22	217
Rotalia mexicana var., Quinqueloculina sp. at 195-217.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, much calcitized, fossiliferous (common to abundant bryozoan remains and Foraminifera)	183	400
Operculinoides floridensis, Siphonina jacksonensis, Epon- ides cocoaensis, Eponides jacksonensis, Planulina cocoa- ensis, Planularia sp. at 217-240.		
Summary:		
No samples	20	20
In Miocene (undifferentiated)	175	195
Oligocene (undifferentiated)	22	217
Upper Eocene (Ocala limestone)	183	400

## **Potential Water-Bearing Zones:**

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## **Remarks**:

Samples of poor quality and contaminated with sand from 195 to total depth.

## EFFINGHAM COUNTY

Location: 2.5 mi. west of Springfield, on State High-	Well No.: GGS 457
way 119	Elev.: 85
Owner: No. 1 Effingham County High School	
Driller: Cecil Turner	
Drilled: 1955	
	Thickness Depth (feet) (feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, angular, arkosic; inclusions		
of kaolin, light, gray, sandy, micaceous	30	30

	Thickness (feet)	De <b>pth</b> (fe <b>et)</b>
Sand: fine-grained, arkosic, finely disseminated phosphatic grains	25	55
Miocene (Undifferentiated):		
Sand: fine to medium-grained, somewhat phosphatic; clay, dark-green, somewhat granular, sandy, phosphatic, micaceou	s 45	100
Clay: dark-gray, sandy, micaceous, phosphatic		160
Reddish-brown, phosphatic fragments present at 120.		
Clay: as above, but somewhat cherty, fossiliferous (macro- shells); interbedded limestone, white, sandy		220
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; some clay, as above		240
Clay: dark-green, blocky, phosphatic		277
Oligocene (Undifferentiated):		
Limestone: gray to cream, nodular (much calcitized), cherty at depth, fossiliferous (casts and molds of megafossils, bryozoan remains, and Foraminifera)	83	360
Rotalia mexicana var., Quinqueloculina sp., Robulus cul- tratus, Dictyoconus <sup>1</sup> sp. at 280. Lepidocyclina (Polylepidina) antillea <sup>1</sup> at 290. Gypsina globula <sup>1</sup> at 320.		

## Summary:

Pliocene to Recent (undifferentiated)	55	55
Miocene (undifferentiated)	222	277
Oligocene (undifferentiated)	83	360

## **Potential Water-Bearing Zones:**

Limestone		83	360
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<sup>&</sup>lt;sup>1</sup>Reworked(?) fossil of middle Eocene age.

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EFFINGHAM COUNTY Well No.: GGS 458

Drilled: 1955	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, angular, arkosic; clay; bluish- gray to yellowish-green to tan to red (mottled), sandy, finely disseminated phosphatic grains		55
Miocene (Undifferentiated):		
Sand: fine-grained, finely disseminated phosphatic grains; clay, dark-green, sandy, somewhat granular, micaceous phosphatic	75	130
Reddish-brown to jet-black phosphatic pebbles common at 80.		
Limestone: cream, saccharoidal (much calcitized), sandy, phosphatic; clay, as above	10	140
Sand: fine to medium-grained, angular, phosphatic	10	150
Clay: dark-green, sandy, abundantly phosphatic, somewhat cherty	80	230
Limestone: light-gray, extremely dense (highly calcitized), saccharoidal, sandy, phosphatic, fossiliferous (macroshells and some bryozoan remains)	10	240
Sand: fine to coarse-grained, phosphatic; some limestone, as above	10	250
Oligocene (Undifferentiated):		
Limestone: gray to cream, nodular (much calcitized), fossili- ferous (casts and impressions of megafossils, some echi- noid and bryozoan remains, and Foraminifera)	40	290
Dictyoconus <sup>1</sup> sp., Gypsina globula <sup>1</sup> , Rotalia mexicana var., Quinqueloculina sp. at 250.		

"Reworked (?) fossil of middle Eocene age.

	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, much calcitized, crystalline, fossiliferous, (abundant bryozoan and echinoid remains and Foramini- fera)	5	360
Robulus alato-limbatus, Robulus arcuato-striatus var., Sara- cenaria sp., Eponides cocoaensis, Planularia sp., Marginu- lina sublituus, Textularia conica, Guttulina irregularis, Guttulina spicaeformis, Globulina gibba, Sigmomorphina semitecta var., Cancris sagra, Siphonina jacksonensis, Ala- bamina obtusa, Discorbis assulata, Cibicides lobatulus at 360.		

#### Summary:

Pliocene to Recent (undifferentiated)	55	55
Miocene (undifferentiated)	195	250
Oligocene (undifferentiated)	105	355
Upper Eocene (Ocala limestone)	5	360

# Potential Water-Bearing Zones:

Sand: fine to medium-grained	10	150
Sand: fine to coarse-grained	10	250
Limestone	110	360

# EFFINGHAM COUNTY

Location: North of U.S. Highway	80 at Faulkville	Well No.: GGS	569
Owner: No. 1 Savannah Foundatio	ion	Elev.: 42	
Drilled: 1959			
		Thicknes (feet)	

## Miocene (Undifferentiated):

•

Sand: fine to coarse-grained, subrounded, arkosic; interbed- ded clay, dark-green to red (mottled), sandy, micaceous	128	128
Clay: dark-green, blocky, sandy, micaceous, phosphatic	79	207
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic	20	227
No samples	21	248
Clay: yellowish-green, sandy, finely disseminated black phos- phatic? grains	61	30 <b>9</b>

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		203
	Thickness (feet)	Depth (feet)
Limestone: light-gray, dense, crystalline, sandy, phosphatic, fossiliferous (fragments, casts and molds of macroshells); sand, fine to coarse-grained, subrounded, phosphatic	. 10	319
Oligocene (Undifferentiated):		
Limestone: light-gray, nodular, somewhat crystalline and saccharoidal, fossiliferous (echinoid and bryozoan remains and Foraminifera)	21	340
Asterocyclina <sup>1</sup> sp., Pyrgo sp., Rotalia byramensis var. at $319-330$ .		
$Dictyoconus^1$ sp. at 330-340.		
Gypsina globula <sup>1</sup> , Quinqueloculina sp. common, Pyrgo sp., Reussella oligocenica, Discorbis alabamensis, Rotalia byramensis var., Globulina sp., Baggina xenoula, Cibicides lobatulus at 340-350.		
Dictyoconus <sup>1</sup> sp. common at 360-370.		
Limestone: <sup>2</sup> cream, somewhat soft and weathered(?), fossili- ferous (macroshells, echinoid and bryozoan remains, and Foraminifera)	- 60	400
G		
Summary:		
Miocene (undifferentiated)		319
Oligocene (undifferentiated)	. 81	400
Potential Water-Bearing Zones:		
Limestone	. 81	400

# EMANUEL COUNTY

	No.: GGS : 330	176
Driller: Virginia Supply and Well Company		
Drilled: February 1949		
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, dark-green at depth, blocky, sandy; inter- bedded sand, fine to coarse-grained, angular, arkosic; lime- stone, yellow to white, massive, crystalline (in texture),		
sandy	178	178

<sup>1</sup>Reworked(?) fossil of middle Eocene age. <sup>2</sup>May be Ocala limestone of upper Eocene age.

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		Thickness (feet)	Depth (feet)
Oligocene (Undiffer	rentiated):		
tain levels, cher ous (casts and zoan remains, s	, dense, crystalline or saccharoidal at cer- rty, coarsely glauconitic at depth, fossilifer- molds of megafossils, echinoid and bryo- and Foraminifera); interbedded sand, fine ed, angular; clay, gray, sandy	180	358
-	ubacuta, Reussella byramensis, Nonion ad- o., Cibicides americanus at 223-236.		
In Upper Eocene: J	ackson Group: Barnwell Formation:		
	7, sparsely glauconitic, fossiliferous (echi- oan remains and Foraminifera)	132	490
	atus, Nonion advena, Valvulineria jackson- assulata at 358-398.		
Middle Eocene: Cla	iborne Group: Lisbon Formation:		
clusions of hard at certain leve angular to subr	to cream, somewhat sandy, limey, with in- d lime nodules, Ostracods and Foraminifera els; interbedded sand, fine to coarse, sub- counded, molluscan shells; thin beds of lime- y, dense, crystalline, sandy, phosphatic	160	650
Operculinoides	sp., Lepidocyclina sp. at 490-498.		
Cibicides westi	at 611-616.		
Glauconite pror	minent at 621-650.		
tain levels frag sils; interbedde	dense, massive, sandy, phosphatic, at cer- gments, molds and impressions of megafos- ed beds of indurated sand, fine to coarse, subrounded, phosphatic, molluscan shells	100	750
Operculinoides	sp. at 710-723.		
	n, much calcitized, granular, cherty, Ostra- ninifera at certain levels		812
	coarse-grained, subangular to subrounded,	11	823
Tallahatta Formatio	on:		,
fish teeth, moll	, somewhat sandy, micaceous, phosphatic, uscan shells (small Gastropods and Pelecy-	90	843

843 pods), Radiolaria and some Foraminifera 20

#### a-----Choro CUDU ..... 70

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, subangular to subrounded, phos- phatic		870
Marl: as above	3	873

#### Summary:

Miocene (undifferentiated)	178	178
Oligocene (undifferentiated)	180	358
In upper Eocene (Barnwell formation)	132	490
Middle Eocene (Lisbon formation)	333	823
Middle Eocene (Tallahatta formation)	50	873

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	3	<b>72</b>
Sand: fine to coarse-grained	5	155
Sand: fine to coarse-grained	16	358
Sand: fine to coarse-grained	13	550
Sand: fine to coarse-grained	10	682
Sand: fine to coarse-grained	11	823
Sand: fine to coarse-grained	<b>27</b>	870

#### **Remarks**:

1. The limestones noted above are dense, crystalline in texture, hence are more or less nonporous. Such limestones, therefore, cannot be relied upon for ground-water supplies.

2. The best aquifers lie below the total depth penetrated by this well and are of Late Cretaceous age. The water-bearing sands enumerated above are thought to be satisfactory for domestic needs only.

#### EMANUEL COUNTY

Location: Approximately 12 mi. northeast of Swains-	Well No.: GGS 372
boro, west side of Highway 56, at school house	Elev.: 255
Owner: No. 1 Summertown Consolidated School	
Driller: Virginia Supply and Well Company	
Drilled: 1954	
	Thickness Depth (feet) (feet)

#### Miocene (Undifferentiated):

Clay: bluish-gray to tan to red (mottled), blocky, very sandy.... 25 25

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	Thickness (feet)	De <b>pth</b> (fe <b>et)</b>
Oligocene (Undifferentiated): Marl: light-gray to pale-green, blocky, silty, fossiliferous (some Foraminifera); limestone, light-gray to white, dense, saccharoidal, sandy, coarsely but sparsely glauconitic, fos- siliferous (fragments, casts and molds of macroshells, echi- noid and bryozoan remains)	15	40
Textularia conica, Spiroplectammina mississippiensis, Dis- corbis assulata, Reussella sp., Elphidium texanum, Valvu- lineria jacksonensis, Rotalia sp., Nonion advena, Nonion inexcavatus, Alabamina mississippiensis, Cibicides ameri- canus var., Cibicides mississippiensis, Cibicides cf. C. re- fulgens at 25-40.		
<ul> <li>Limestone: white to cream, rather dense, saccharoidal, por- ous<sup>1</sup>, sandy, sparsely phosphatic, fossiliferous (fragments, casts and molds of macroshells, some echinoid and bryo- zoan remains, and Foraminifera)</li> <li>Asterigerina subacuta, Rotalia byramensis var., Discorbis hemisphaerica, Reussella cf. R. oligocenica at 40-75.</li> </ul>	185	225

#### **Upper Eocene: Barnwell Formation:**

Cibicides lobatulus at 225-275.

Marl: light-gray, somewhat indurated, sparsely glauconitic, sandier with depth, fossiliferous (Foraminifera and Ostra- cods); interbedded limestone, as above	145	370
Textularia hockleyensis, Textularia dibollensis var., Nonion advena, Nonion inexcavatus, Valvulineria jacksonensis, Dis- corbis assulata, Angulogerina ocalana, Cibicides ameri-		

Discorbis assulata, Nonion advena, Nonion inexcavatus, Valvulineria jacksonensis prominent at 275-350.

canus, Cibicides mississippiensis, Cibicides cf. C. cocoaensis,

Discorbis cocoaensis, Nonion advena, Nonion inexcavatus, Reussella eocena prominent at 350-370.

#### Summary:

Miocene (undifferentiated)	25	25
Oligocene (undifferentiated)	200	225
Upper Eocene (Barnwell formation)	145	370

## **Potential Water-Bearing Zones:**

Limestone	185	225
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<sup>3</sup>Cavities represent former macroshells that have been dissolved away by percolating ground water.

EMANUEL COUNTY Location: Approximately 8 mi. south of Swainsboro at Well No.: GGS 373 Elev.: 245 Owner: No. 1 Lexsy Consolidated School Driller: Virginia Supply and Well Company Thickness Depth (feet) (feet) Miocene (Undifferentiated): Clay: bluish-gray to tan to red (mottled), very sandy \_\_\_\_\_ 70 70

#### Oligocene (Undifferentiated):

at 250-270.

Lexsy

Drilled: 1954

Limestone: cream, saccharoidal, finely disseminated black phosphatic grains, cherty, very sandy	80	150
Marl: dark-green, blocky, fossiliferous (some Ostracods and Foraminifera); limestone as above	15	165
Spiroplectammina mississippiensis, Quinqueloculina sp., Reussella oligocenica, Rotalia mexicana var., Asterigerina subacuta, Nonion advena, Cibicides americanus var., Cibi- cides lobatulus at 150-165.		
Sand: fine to coarse-grained, subangular; clay, yellowish- green, silty	15	180
Limestone: white to cream, nodular, saccharoidal, very sandy, fossiliferous (some macroshells, echinoid and bryozoan re- mains, Ostracods, and Foraminifera)	70	250
Rotalia mexicana var. at 180-250.		
Sand: medium-grained, subangular, light-brown phosphatic pebbles; some marl, cream, silty, somewhat granular, fos- siliferous (some macroshells, echinoid and bryozoan re- mains, Ostracods, and Foraminifera)	20	270
Discorbis alveata, Discorbis assulata, Discorbis cocoaensis, Cancris sagra, Valvulineria jacksonensis, Reussella byra- mensis, Nonion advena, Nonionella hantkeni var., Cibicides americanus var., Cibicides lobatulus, Rotalia mexicana var.		

#### Summary:

Miocene (undifferentiated)	<b>70</b>	70
Oligocene (undifferentiated)	<b>200</b>	270

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone		250
Sand	15	265

#### EMANUEL COUNTY

Location: Approximately 1 mi. west of Garfield Owner: No. 1 Theodore Johnson Driller: Turner Well Drilling Company	Well No Elev.: 2		567
Drilled: 1959			
		ickness (feet)	Depth (feet)

# Miocene (Undifferentiated):

Clay: light-gray to purple (mottled), very sandy, micaceous	20	20
Sand: fine to coarse-grained, subangular, arkosic	20	40
Clay: yellowish-green, sandy, micaceous, carbonaceous, kaolin inclusions	20	60
Clay: as above, but much sandier	20	80
Sand: fine to coarse-grained, subangular, arkosic; some clay, dark-green, sandy, micaceous, carbonaceous	20	100
Clay: dark-green, sandy, carbonaceous	80	180
Clay: as above but much sandier and cherty	20	200
Clay: as above; limestone, light-brown, somewhat dolomitized, saccharoidal, sandy, phosphatic	30	230
Oligocene (Undifferentiated):		
Limestone: light-brown, dense, saccharoidal, somewhat sandy, fossiliferous (some macroshells, echinoid and bryozoan re- mains, and Foraminifera)	50	280
Elphidium texanum, Cibicides americanus var., Cibicides pseudoungerianus, Cibicides lobatulus at 230-250.		

# Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: cream to light-gray at depth, dense, granular,		
sandy, somewhat fossiliferous (some macroshells, echinoid		
and bryozoan remains)	70	350

	Thickness (feet)	Depth (feet)
Summary:		
Miocene (undifferentiated)		230
Oligocene (undifferentiated)		280
Upper Eocene (Ocala limestone)	70	350
Potential Water-Bearing Zones:		
Sandstone		40
Limestone		350
EM	ANUEL CO	UNTY
Decamon,	ll No.: GGS v.: 335	568
	Thickness (feet)	Depth (feet)

# In Miocene (Undifferentiated):

Sand: fine to coarse-grained, subangular, arkosic; some clay, dark-green, sandy	20	220
Clay: dark-gray, sandy; limestone, white to cream, dense, saccharoidal, very sandy, phosphatic, somewhat fossilifer- ous (some macroshells, echinoid and bryozoan remains)	15	235

No samples \_\_\_\_\_ 200

# Oligocene (Undifferentiated):

Foraminifera)	10	2
Eponides byramensis, Baggina xenoula, Eponides ala- bamensis, Asterigerina subacuta, Discorbis assulata, Reus- sella oligocenica, Reussella byramensis, Discorbis hemis- phaerica, Angulogerina byramensis, Cibicides americanus var., Rotalia byramensis var., Cibicides lobatulus, Cibicides hazzardi, Anomalina bilateralis at 235-245.		
Clay: light-brown to yellowish-green, blocky; some marl		
Clay: light-brown to yellowish-green, blocky; some marl (cave?), as above	20	

209

	Thickness (feet)	Depth (feet)
Limestone: white, dense, somewhat crystalline and saccha- roidal, cherty, fossiliferous (fragments of macroshells,	15	000
echinoid and bryozoan remains)	15	280
Limestone: white, nodular, dense, fossiliferous (macroshells)	20	300
Limestone: as above, but considerably leached, much of it weathered to white clay	20	320
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, granular, very sandy, coarsely glauconitic, fossiliferous (macroshells, echinoid and bryozoan remains, and some Foraminifera)	30	350
Spiroplectammina mississippiensis var., Textularia sp., Robulus alato-limbatus, Robulus limbosus var., Nodosaria latejugata var., Dentalina jacksonensis, Guttulina irregu- laris, Guttulina spicaeformis, Spirillina sp., Planularia sp., Gyroidina? sp., Eponides jacksonensis, Siphonina jack- sonensis, Cibicides americanus var., Cibicides ouachitaen- sis at 320-348.		

Summary:

No samples .	200	200
In Miocene (undifferentiated)	35	235
Oligocene (undifferentiated)	85	320
Upper Eocene (Ocala limestone)	30	350

# Potential Water-Bearing Zones:

Limestone		30	350
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#### **GLYNN COUNTY**

Location: City of BrunswickWell No.:Owner: Hercules Powder CompanyElev.: 10Driller: Layne-Atlantic CompanyElev.: 10		GS 5	
Drilled: July 1942			
	Thickness (feet)	Depth (feet)	
Pliocene to Recent (Undifferentiated):			
Sand: fine to coarse-grained, phosphatic		165	

211

Thickness Depth (feet) (feet)

# In Miocene (Undifferentiated):

Clay: dark-green, sandy, cherty, phosphatic; interbedded sand, fine to coarse-grained, phosphatic	125	290
Dolomitic limestone: light brown, saccharoidal, sandy, phos- phatic	15	305
Sand: fine to coarse-grained; interbedded limestone, white, sandy, phosphatic, fossiliferous (macroshells); dolomitic limestone and clay, as above	100	405
Limestone: white, very sandy, phosphatic, fossiliferous (macroshells)	135	540
No samples	20	560

# In Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: light-gray to white, massive, dense (much calci- tized), fossiliferous (macroshells, echinoid and bryozoan remains, Ostracods, and Foraminifera)	440	1,000
Abundant bryozoan remains, <i>Gyroidina</i> sp., <i>Gypsina</i> sp. at 560.		
Operculinoides sp. at 595.		
Asterocyclina nassauensis, Operculinoides floridensis at 610.		
Amphistegina pinarensis var. at 695-1063.		

### Middle Eocene: Claiborne Group (Undifferentiated):

Dolomitic	limestone:	brown,	saccharoidal		60	1,060
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#### Summary:

Pliocene to Recent (undifferentiated)	165	165
In Miocene (undifferentiated)	375	540
No samples	<b>20</b>	560
In upper Eocene (Ocala limestone)	440	1,000
Middle Eocene (Claiborne group, undifferentiated)	60	1,060

# **Potential Water-Bearing Zones:**

Limestone		285	845
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# **GLYNN COUNTY**

	GLINN COO	NII
,	Well No.: GG Ele <b>v.: 18</b>	S 20
-	Thickness (feet)	Depth (feet)
	···· · · ·	
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, phosphatic; interbedded cl dark-gray, silty, micaceous		155
In Miocene (Undifferentiated):		
Clay: green, silty, finely phosphatic		245
No samples		320
Sand: fine to coarse-grained, abundantly phosphatic; so clay, as above	me	405
Dolomitic limestone ("cave"?) at 395-405.		
Sand: fine to coarse-grained, abundantly phosphatic; int bedded limestone, white, sandy, fossiliferous (macroshel		535
Oligocene (Undifferentiated):		
Limestone: gray, nodular, somewhat calcitized, fossiliferor	us 15	550
Rotalia byramensis var. at 535-550.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, calcitized, fossiliferous (abundant br zoan remains and some Foraminifera)	•	694
Operculinoides floridensis at 550-610.		
Summary:		
Pliocene to Recent (undifferentiated)		155
In Miocene (undifferentiated)		535
Oligocene (undifferentiated)		550
Upper Eocene (Ocala limestone)		694
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	50	455

Sand: fine to coarse-grained	50	455
Limestone	159	6 <b>94</b>

GLYNN	COUNTY

Owner: Hercules Powder Company E Driller: Layne-Atlantic Company		No.: GG : 15 <sup>1</sup>	S 197
Drilled: February 1951		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine to coarse-grained, nearly gravel at depth		150	150
Miocene (Undifferentiated):			
Clay: dark-green, silty, cherty, phosphatic; interbedded san fine to coarse-grained, phosphatic		155	305
Dolomitic limestone: light-brown, saccharoidal, sandy, pho phatic, fossiliferous (abundant oyster shells)		63	368
Sand: fine to coarse-grained, abundantly phosphatic; inte bedded clay, dark-green, silty, phosphatic		26	394
Sand: fine to coarse-grained, abundantly phosphatic; inte bedded limestone, white, sandy, fossiliferous (macroshells		70	464
Limestone: gray to light-brown, somewhat dolomitic, den (much calcitized), sandy, phosphatic, fossiliferous (fra ments and molds of macroshells)	g-	60	524
Oligocene (Undifferentiated):			
Limestone: light-gray, dense (much calcitized), nodular, fo siliferous (bryozoan remains, macroshells, and some For minifera)	a-	31	555
Pyrgo sp., Gyroidina? sp., Asterocyclina sp. at 524-555.		·	
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: white, much calcitized, fossiliferous (abunda macroshells and bryozoan remains, and some Foraminife		303	858
Operculinoides floridensis, Pseudophragmina flintensis 555.	at		
Dolomitic limestone: brown, saccharoidal	·····	157	1,015

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

.

	Thickness (feet)	De <b>pth</b> (feet)
Summary:		
Pliocene to Recent (undifferentiated)	. 150	150
Miocene (undifferentiated)	374	524
Oligocene (undifferentiated)	_ 31	55 <b>5</b>
Upper Eocene (Ocala limestone)	460	1,015
Potential Water-Bearing Zones:		
Limestone	- 334	858

#### **Remarks:**

Samples of poor quality.

#### **GLYNN COUNTY**

Location: 5 mi. southwest of Brunswick	Well No.: GGS 362
Owner: No. 1 Roy Massey	Elev.: 20
Driller: E. B. LaRue Drilling Company	(derrick floor)
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine-grained, finely disseminated phosphatic grains; interbedded clay, dark-gray, lignitic, micaceous, fossilifer- ous (megafossils at certain horizons)	40	40
Limestone: gray to light-brown, dense (much calcitized), sac- charoidal, sparsely phosphatic, fossiliferous (casts of mega- fossils)	20	60
Sand: fine to coarse-grained, rounded, phosphatic	120	180
Miocene (Undifferentiated):		
Clay: dark-green, silty, phosphatic, cherty; interbedded sand, fine to coarse-grained, phosphatic	120	300
Dolomitic limestone: light-brown, sandy, phosphatic; sand, fine to coarse-grained, phosphatic	60	360
Same lithology as above but with increasing amounts of dark- green sandy clay	40	400
Sand: fine to coarse-grained, phosphatic; interbedded lime- stone, white, sandy, fossiliferous (macroshells); some clay, as above	180	580

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Well Logs of the Coastal Plain of Georgia		215
	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: cream, somewhat granular (calcitized), fossiliferou	s 20	600
Rotalia byramensis var. at 580-600.		
Upper Eocene: Jackskon Group: Ocala Limestone:		
Limestone: rather dense (calcitized), fossiliferous (bryozoan remains, macroshells, and Foraminifera)	400	1,000
Operculinoides floridensis at 600-620.		
Gypsina globula at 660-680.		
Pseudophragmina flintensis at 700-720.		
Amphistegina pinarensis var. at 920-940.		
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: white, rather calcitized; interbedded dolomitic limestone, brown, saccharoidal	400	1,400
Lepidocyclina (Polylepidina) antillea, Asterocyclina monti- cellensis at 1000-1020.		
Summary:		
$\mathbf{D}^{1}$	100	100

F

Pliocene to Recent (undifferentiated)	180	180
Miocene (undifferentiated)	400	580
Oligocene (undifferentiated)	20	600
Upper Eocene (Ocala limestone)	400	1,000
Middle Eocene (Claiborne group, undifferentiated)	400	1,400

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	120	180
Sand: fine to coarse-grained	150	570
Limestone	400	1,000

# **GLYNN COUNTY**

Location: 0.25 mi. north of Glynn-Camden County line,	Well No.: GGS 376
west side of Highway 17	Elev.: 20
Owner: No. 1 C. E. P. Curry	(derrick floor)
Driller: E. B. LaRue Drilling Company	
Drilled: 1955	

	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, phosphatic, finely disseminated phos- phatic grains; interbedded with thin stringers of clay, dark- brown, fissile, silty, lignitic, micaceous, fossiliferous	20	20
Indurated sand: fine to medium-grained, fossiliferous		35
Limestone: light-gray, dense (much calcitized), sandy, sparse- ly phosphatic, fossiliferous (casts and impressions of mega-	10	00
fossils)	65	100
Clay: dark-gray, silty	10	110
Sand: very coarse-grained, rounded, phosphatic	40	150
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic, cherty (at certain hori- zons); interbedded with sand, fine to coarse-grained, phos- phatic	190	340
Dolomitic limestone: light-brown, saccharoidal, sandy, coarsely phosphatic; some clay as above	60	400
Clay: dark-green, silty; with sand, fine to coarse-grained, phosphatic		440
Sand: fine to coarse-grained, phosphatic; interbedded lime- stone, dense (calcitized), sandy, phosphatic, fossiliferous (molds, impressions, and fragments of megafossils)		580
Oligocene (Undifferentiated):		
Lithology as in interval 440-580; fragments of limestone, light-gray, dense (calcitized), nodular, fossiliferous (Fora- minifera scarce)		600
Rotalia byramensis var. at 580-600.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: dense (calcitized), fossiliferous, dolomitized at depth		910
Bryozoan remains and macroshells at 600-620.		
Operculinoides sp., Gypsina globula at 620-640.		
Pseudophragmina flintensis at 640-660.		
Dolomitic limestone: brown, saccharoidal	70	980

<b>x</b>	217
Thickness (feet)	Depth (feet)
	1,350
	(feet)

Pliocene to Recent (undifferentiated)	150	150
Miocene (undifferentiated)	430	580
Oligocene (undifferentiated)	<b>20</b>	600
Upper Eocene (Ocala limestone)	380	980
Middle Eocene (Claiborne group, undifferentiated)	370	1,350

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	40	150
Sand: fine to coarse-grained	60	600
Limestone	300	900

# **GLYNN COUNTY**

Location: Jekyll Island	Well No.: GG	S 431
Owner: No. 1 Jekyll Island (State of Georgia)	Elev.: $12^1$	
Driller: M. M. Gray		
Drilled: 1955		
	Thickness (feet)	Depth (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine-grained, phosphatic (finely disseminated)	25	25
Clay: dark-gray, silty, sparsely phosphatic, micaceous, fossil- iferous; sand, as above	80	105
Miocene (Undifferentiated):		
Sand: fine to medium-grained, phosphatic	20	125
Clay: dark-green, sandy, phosphatic, cherty; interbedded with sand, fine to coarse-grained, phosphatic	160	285
Sand: fine to coarse-grained, abundantly phosphatic; inter- bedded limestone, white, sandy, phosphatic, fossiliferous; dolomitic limestone, light-brown, saccharoidal, sandy, phos- phatic; and clay, as above	280	565
Dolomitic limestone prominent at 285-295.		
Macroshells common at 435-475.		

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

Oligocene (Undifferentiated):	Thickness (feet)	De <b>pth</b> (feet)
Limestone: cream, nodular, much calcitized, fossiliferous (macroshells, bryozoan remains, and some Foraminifera)	10	575
Rotalia mexicana var., $Argyrotheca$ sp., $Operculinoides^2$ sp., and macroshells common at 575-585.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, rather dense (calcitized), fossiliferous (macroshells, echinoid and bryozoan remains, and Fora- minifera)	131	706
Operculinoides sp. at 575-585.		

Gypsina globula at 635-645.

#### Summary:

Pliocene to Recent (undifferentiated)	105	105
Miocene (undifferentiated)	<b>460</b>	565
Oligocene (undifferentiated)	10	575
Upper Eocene (Ocala limestone)	131	706

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	20	175
Sand: fine to coarse-grained	50	495
Limestone	131	706

# **GLYNN COUNTY**

Location: Jekyll Island	Well No.: GGS	5 <b>452</b>
Owner: No. 2 Jekyll Island (State of Georgia)	Elev.: 12 <sup>1</sup>	
Driller: M. M. Gray		
Drilled: 1955		
	Thickness (feet)	Depth (feet)

#### Pliocene to Recent (Undifferentiated):

Sand: fine-grained, finely disseminated phosphatic grains; in- terbedded clay, dark-gray, silty, lignitic, micaceous, fossil- iferous	50	50
Sand: fine to coarse-grained, rounded, phosphatic; limestone, dark-gray, dense (much calcitized), sandy, sparsely phos-		
phatic	10	60
Clay: yellowish-green to cream, very sandy	45	105
Average elevation based on Georgia State Highway Mans		

<sup>1</sup>Average elevation based on Georgia State Highway Maps. <sup>2</sup>Reworked (?) fossil of middle Eocene age.

Well Logs of the Coastal Plain of Ge	ORGIA	219
Miocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: dark-green, sandy, blocky, phosphatic, cherty at cer levels; interbedded sand, fine to coarse-grained, phosph		250
Sand: fine to coarse-grained, phosphatic; interbedded l stone, white, sandy, phosphatic, fossiliferous; dolor limestone, light-brown, saccharoidal, sandy, phosph clay, dark-green, silty	nitic atic;	550
Dolomitic limestone common at 250-260.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, dense (calcitized), fossiliferous ( roshells, bryozoan remains, and Foraminifera)		700
Operculinoides floridensis at 550-560.		
Summary:		
Pliocene to Recent (undifferentiated)	105	105
Miocene (undifferentiated)		550
Upper Eocene (Ocala limestone)		700
<ul> <li>Potential Water-Bearing Zones:</li> </ul>		
Sand: fine to coarse-grained		60
Sand: fine to coarse-grained		400
Limestone		700
	GLYNN COI	UNTY
Location: Brunswick Owner: Allied Chemical Company, Solvay Process Division Driller: Layne-Atlantic Company	Well No.: GC Elev.: 15 <sup>1</sup>	IS 530
Drilled: 1955	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, finely disseminated phosphatic gra interbedded clay, dark-gray, fissile, lignitic, micaceous, siliferous at certain levels	fos-	65
Limestone: dark-gray, dense (much calcitized), sandy, phatic, fossiliferous		80

 phatic, fossiliferous
 15

 Clay: gray, somewhat indurated, sandy, containing coarse
 15

 grains of quartz
 15

 Sand: medium to very coarse-grained, rounded, phosphatic
 55

95

150

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

Miocene (Undifferentiated):	Thickness (feet)	De <b>pth</b> (feet)	
Clay: dark-green, sandy, phosphatic, cherty; interbedded lime- stone, gray, dense (much calcitized), sandy, fossiliferous; sand, fine to coarse-grained, phosphatic	115	265	
Dolomitic limestone: light-brown, fine-grained, saccharoidal; clay, pale-green, sandy; limestone, white, dense (calcitized), very sandy, coarsely phosphatic, fossiliferous	235	500	
Limestone, white, sandy, fossiliferous (a coquina) at 265-280.			
Indurated sand (or dolomitic limestone), light-brown, fine- grained, saccharoidal, phosphatic, at 280-310.			
Clay, pale-green, sandy, with interbedded dolomitic lime- stone at 310-370.			
Limestone, white, dense (much calcitized), very sandy, coarsely phosphatic, fossiliferous at 390-500.			
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: cream, massive, much calcitized, fossiliferous (macroshells, bryozoan remains, and Foraminifera)	300	800	
Operculinoides sp. at 500-510.			
Asterocyclina sp. at 520-530.			
Asterocyclina nassauensis, Gypsina globula at 530-540.			
Pseudophragmina flintensis at 590-600.			
Operculina mariannensis at 610-620.			
Summary:			
Pliocene to Recent (undifferentiated)	150	150	

Pliocene to Recent (undifferentiated)	150	150
Miocene (undifferentiated)	350	500
Upper Eocene (Ocala limestone)	300	800

# Potential Water-Bearing Zones:

Sand: coarse-grained	55	150
Limestone	300	800

**GRADY COUNTY** 

Location: Northern part of town, 2 blocks west of Broad Street (Highway 84) in Cairo Owner: No. 1 ("North Well") City of Cairo Driller: Layne-Atlantic Company Drilled: 1946	Well No.: GG Elev.: 265	S 140
	Thickness (feet)	Depth (ieet)
Pliocene to Recent (Undifferentiated):		
Sand: fine-grained, micaceous, phosphatic (finely disse nated)		51
Miocene (Undifferentiated):		
Clay: pale-green, sandy; sand, medium-grained, angular	106	157
Clay: yellowish-green, sandy, somewhat indurated and to at depth; interbedded limestone, light-gray to cream, sa	Ŷ	285
Limestone: cream, much calcitized, somewhat saccharoi sandy, fossiliferous (casts and molds of megafossils, r Ostracods and Foraminifera)	are	368
Archaias sp. at 362-368.		
In Oligocene(?) (Undifferentiated):		
Limestone: cream, nodular, somewhat sandy, fossilifer (megafossils and Foraminifera <sup>1</sup> )		439
Upper Eocene(?): Jackson Group: Ocala Limestone:		
Dolomitic limestone: gray to brown at depth, saccharoidal	L	495
Summary:		
Pliocene to Recent (undifferentiated)		51
Miocene (undifferentiated)		368
In Oligocene(?) (undifferentiated)		439
Upper Eocene (?) Ocala limestone		495
Potential Water-Bearing Zones:		
Limestone		439

<sup>&</sup>lt;sup>1</sup>So poorly preserved as to be unidentifiable.

# **GRADY COUNTY**

	GRADI COU	1111
Location: Southern part of town, west side of Broad Street, in Cairo Owner: No. 2 ("South Well") City of Cairo Driller: Layne-Atlantic Company Drilled: 1946	Well No.: GG Elev.: 234	S 141
Difficu. 1940	${f Thickness}\ ({f feet})$	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: bluish-gray to pink (mottled), sandy, limonitic		9
Clay: tan to bluish-gray (mottled), sandy, limonitic.		15
Sand: fine-grained, micaceous, phosphatic (finely dissemin	ated) 18	33
Lignite: black; and clay, gray, blocky, sandy	16	49
Miocene and Oligocene (Undifferentiated):		
Sand: medium-grained, angular, arkosic; and clay, as abov	e 14	63
No samples		84
Clay: yellowish-green to red (mottled), sandy; interbed limestone, cream to gray to light-brown, somewhat dolo tized and saccharoidal at certain levels, sandy, fossilifer at depth (casts and molds of megafossils)	mi- ous	402
Limestone with casts and molds of megafossils promin at 323-370.	ent	
Upper Eocene(?): Jackson Group: Ocala Limestone:		
Dolomitic limestone: brown, saccharoidal		434
Summary:		
Pliocene to Recent (undifferentiated)		49
Miocene and Oligocene (undifferentiated)		402 434
Upper Eocene(?) (Ocala limestone)		404
Potential Water-Bearing Zones:		
Limestone		370
Limestone		434
Remarks:		

Samples appear to be of poor quality.

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GRADY	COUNTY

Location: Center of town, south side of Atlantic Coast Line R.R., west side of City Water Works in Cairo Owner: City of Cairo Driller: Layne-Atlantic Company	Well No.: GGS 205 Elev.: 240		
Drilled: May 1950	т	hickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Clay: bluish-gray to tan to red (mottled), very sandy, limo	nitic_	15	15
Sand: fine-grained, somewhat argillaceous, finely disse nated phosphate grains		15	30
Miocene (Undifferentiated):			
Clay: white to pale-green, blocky, tough, sandy, cherty depth; interbedded sand, fine to coarse-grained, angu phosphatic at depth	lar,	82	112
Chert prominent at 81-96.			
Brown phosphatic pebbles common at 96-112.			
Limestone: white, sandy, somewhat dolomitized at cert levels; interbedded clay, as above		182	294
Limestone: gray, nodular, rather massive, fossiliferous (ca and molds of megafossils and rare Foraminifera)		61	355
Archaias sp. at 309-325.			
Oligocene (Undifferentiated):			
Limestone: cream, sandy, somewhat dolomitized at dep fossiliferous (casts and molds of megafossils); beds clay, dark-green, somewhat indurated, tough	of	122	477
In Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: light-brown, dense, nodular, somewhat dolo tized, fossiliferous (echinoid and bryozoan remains a Foraminifera)	and	47	524
Robulus sp., Quinqueloculina sp., Gypsina globula at 494-5			
Dolomitic limestone: brown, saccharoidal		63	587
Summary:			
Pliocene to Recent (undifferentiated)		30	30

# Pliocene to Recent (undifferentiated)3030Miocene (undifferentiated)325355Oligocene (undifferentiated)122477In upper Eocene (Ocala limestone)110587

	Thickness (feet)	Deptl. (feet)
Potential Water-Bearing Zones:		
Limestone	130	500

#### Remarks:

Water below depth of 500 not suitable because of excessive mineralization.

#### GRADY COUNTY Location: 7 mi. north of Cairo Well No.: GGS 493 **Owner: No. 1 Shiver Elementary School** Drilled: 1956 Thickness Depth (feet) (feet) Miocene (Undifferentiated): Clay: brick-red, mottled at depth, sandy, micaceous, limonitic 90 90 Clay: yellowish-green, sandy 130 40 150 Sand: fine-grained, angular 20 Limestone: white to brown, dolomitized at certain levels, sandy 270 120 Clay: dark-green, sandy 40 310 Limestone: as above 320 10 340 No samples 20 In Oligocene and Upper Eocene (Undifferentiated): Limestone: cream, somewhat crystalline and calcitized, nodular, fossiliferous (echinoid and bryozoan remains and Fora-380 minifera) 40 Rotalia mexicana var. at 340. 400 20 No samples 400 Dolomitic limestone: brown, saccharoidal ? 420 No samples 20 Limestone: brown to cream, nodular, fossiliferous (Foramini-540 fera); dolomitic limestone, as above 120 Asterigerina subacuta at 420. Operculinoides sp., Lepidocyclina sp. at 460. Operculinoides sp., Lepidocyclina sp. at 540.

	Thickness (feet)	Depth (feet)
No samples	10	550
Dolomitic limestone: as above	?	550

#### Summary:

Miocene (undifferentiated)	320	320
No samples	20	340
In Oligocene and upper Eocene (undifferentiated)	<b>210</b>	550

#### Potential Water-Bearing Zones:

Limestone	40	380
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#### **Remarks:**

Samples of poor quality-too poor to permit selection of top of upper Eocene (Ocala) limestone.

#### **GRADY COUNTY**

Location: 14 mi. south of Cairo Owner: No. 1 Beckbranch School Drilled: 1956	Well No.: GGS 494	
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: yellow (or ochre), sandy, limonitic	60	60
No samples		80
In Miocene (Undifferentiated):		
Clay: pale-green, somewhat fossiliferous	?	80
No samples		100
Limestone: cream, sandy	?	100
No samples		120
Clay: light to dark-green, phosphatic; interbedded with lis stone, cream to light-gray to light-brown, somewhat dolo		
tized and saccharoidal at certain levels, sandy		<b>2</b> 80
No samples	20	300
Clay: light-gray, blocky; interbedded with limestone, as ab	ove	380

	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)	. 60	60
No samples	. 20	80
In Miocene (undifferentiated)	. 300	380

# **Potential Water-Bearing Zones:**

None observed to total depth of well.

#### HOUSTON COUNTY

	1000	1011 00	
Location: Approximately 75 ft. east of Big Indian Creek, at City Water Works, Perry Owner: City of Perry	Well I Elev.:	No.: GGS 295	53
Driller: Layne-Atlantic Company			
Drilled: 1939		Thickness (feet)	Depth (feet)
Middle and Lower Eocene and Paleocene (Undifferentiate	d):		
Sand: fine to medium-grained, limonitic; and clay, gray	sandy	78	78
Upper Cretaceous: Providence Sand:			
Kaolin: gray to red (mottled), sandy, micaceous; interb sand, fine to coarse-grained, arkosic, limonitic		122	200
Ripley, Cusseta and Blufftown (Undifferentiated):			
Clay: dark-gray, silty, micaceous, pyritiferous		- 75	275
Sand: fine to coarse-grained, arkosic; interbedded cla kaolin), gray to red (mottled), micaceous, sandy		480	755
No samples		165	920
In Tuscaloosa Formation:			
Clay: gray to purple (mottled), micaceous, sandy; num beds of sand, fine to coarse-grained, angular, arkosic, l itic	imon-	340	1,260
Summary:			
Middle and lower Eocene and Paleocene (undifferentiated	)	- 78	78
Upper Cretaceous (Providence sand)			200
Upper Cretaceous (Ripley, Cusseta and Blufftown, und	iffer-		
entiated)			755
No samples			920
In Upper Cretaceous (Tuscaloosa formation)		. 340	1,260

227	
Depth (feet)	

92

Potential Water-Bearing Zones:	(feet)
Sand: coarse-grained	

Sand: coarse-grained	15	200
Sand: coarse-grained	19	319
Sand: coarse-grained	4	371
Sand: coarse-grained	20	676
Sand: coarse-grained	11	715
Sand: coarse-grained	5	975
Sand: coarse-grained	20	1,220

# HOUSTON COUNTY

Thickness

Location: Southeast corner of Land Lot 266, 14th Land District	Well No.: GGS 194 Elev.: 364
Owner: No. 1 H. B. Gilbert Driller: Tricon Minerals, Inc. Drilled: September 1949	
	Thickness Depth (feet) (feet)

# Oligocene and Eocene (Undifferentiated):

Clay: yellowish-green to red (mottled), blocky, carbonaceous, somewhat sandy; and limestone, cream colored, cherty, fos- siliferous (bryozoan remains)	30	30
Limestone: as above	38	68
Sand: fine to medium-grained, angular.	21	89
Clay: dark-green to tan to red (mottled), sandy; limestone, as above; and sand, fine to medium grained	30	119
Sand: fine to medium-grained	31	150
No samples	40	190
In Paleocene: Midway Group: Clayton Formation:		
Clay: dark-brown, blocky, lignitic; and sand, fine to coarse- grained, pyritiferous	15	205
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse, angular, arkosic, pyritiferous; and thin beds of clay (or kaolin), mottled, sandy, micaceous	180	385
Ripley and Cusseta (Undifferentiated):		
Clay: bluish-gray to black, carbonaceous, micaceous, sideritic, pyritiferous; some sand, fine to coarse-grained, arkosic, pyritiferous	95	480

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, arkosic, pyritiferous; and thin beds of clay (or kaolin), gray to red (mottled), micaceous, sandy	340	820
Blufftown and Eutaw (Undifferentiated):		
Sand: fine to coarse-grained, arkosic; and thin beds of clay, dark-brown, fissile, lignitic, micaceous, somewhat sandy		910
Tuscaloosa Formation:		
Sand: fine to coarse-grained, massive, arkosic, pyritiferous; interbedded clay (or kaolin), white to gray (mottled), mi- caceous, sandy		1,195
Sand: as above; interbedded clay, green to red (somewhat mottled), iron-stained, somewhat fissile, micaceous, sandy	265	1,460
Sand: coarse-grained, arkosic, massive		1,555
Lower Cretaceous(?) (Undifferentiated):		
Clay: brick-red, sandy, highly micaceous		1,685
ouy, bitch iou, bundy, mgmy meaceousta	100	2,000
Basement Complex (Undifferentiated):		
Crystalline rock		1,698
Summary:		
Oligocene and Eocene (undifferentiated)		150
No samples		190
In Paleocene (Clayton formation)		205
Upper Cretaceous (Providence sand)		385
Upper Cretaceous (Ripley and Cusseta, undifferentiated)		820
Upper Cretaceous (Blufftown and Eutaw, undifferentiated)		910
Upper Cretaceous (Tuscaloosa formation)		1,555
Lower Cretaceous(?) (undifferentiated)		1,685
Basement complex (undifferentiated)	13	1,698
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		89

Sand: fine to coarse-grained	21	07
Sand: fine to coarse-grained	31	150
Sand: fine to ocarse-grained		270
Sand: fine to coarse-grained		385
Sand: fine to coarse-grained		67 <b>5</b>
Sand: fine to coarse-grained	125	960
Sand: fine to coarse-grained		1,195
Sand: fine to coarse-grained		1,555

н	ous	TON COU	UNTY
	Vell N llev.:	Io.: GGS 318	318
Diffied, September 1992		Thickness (feet)	Depth (feet)
Middle and Lower Eocene (Undifferentiated):			
Sand: fine to coarse-grained, limonitic; interbedded cl gray, lignitic, micaceous		90	90
Paleocene: Midway Group: Clayton Formation:			
Clay; dark-gray, hackly, lignitic		6	96
Upper Cretaceous: Providence Sand:			
Clay (or kaolin): white to pink (mottled), micaceous, so what sandy; interbedded sand, fine to coarse-grained, kosic, pyritiferous, sideritic	ar-	_ 47	143
Sand: fine to coarse-grained, arkosic, pyritiferous, sideri interbedded clay (or kaolin), gray to red (mottled), san micaceous	ıdy,	- 73	216
Ripley and Cusseta (Undifferentiated):			
Marl: bluish-gray, lignitic, micaceous, sandy, sideritic, pyr ferous	riti-	29	245
Sand: fine to coarse-grained, rather massive, angular, an sic; interbedded clay (or kaolin), gray, micaceous, sand		245	490
Blufftown Formation:			
Clay: dark-brown, fissile, lignitic, micaceous, sandy		. 14	504
Sand: fine to coarse-grained, massive, angular, arkosic, caceous, pyritiferous; interbedded clay, dark-brown, fiss lignitic, micaceous, sandy	sile,	120	624
Summary:			
Middle and lower Eocene (undifferentiated) Paleocene (Clayton formation) Upper Cretaceous (Providence sand) Upper Cretaceous (Ripley and Cusseta, undifferentiated) Upper Cretaceous (Blufftown formation)		- 6 - 120 - 274	90 96 216 490 624
- PLOT CLORECORD (DIRTICOLIN TOLINGUON)			

		Thickness (feet)	Dep <b>th</b> (feet)
<b>Potential Water-Bearing Zones:</b>			
Sand: fine to coarse-grained			153
Sand: fine to coarse-grained			215
Sand: fine to coarse-grained			329
Sand: fine to coarse-grained		24	385
Sand: fine to coarse-grained		64	471
Sand: fine to coarse-grained			586
Sand: fine to coarse-grained		25	624
	HOUS	STON CO	UNTY
Location: Southwest part of City of Warner Robins Owner: No. 1 City of Warner Robins Driller: Layne-Atlantic Company Drilled: January 1954		No.: GGS	
Difficu. Sanuary 1884		Thickness (feet)	Depth (feet)
Tertiary (Undifferentiated): Clay: brick-red, very sandy, limonitic		20	20
Upper Cretaceous: Providence Sand:			
Kaolin: gray to pink (mottled), micaceous, sandy; sand, to coarse-grained		34	54
Sand: fine to coarse-grained, massive, angular, arkosic		56	110
Ripley, Cusseta, Blufftown and Eutaw (Undifferentiated):			
Clay: gray to pink, sandy, micaceous			142
Sand: fine to coarse-grained, angular, arkosic; interbo clay, as above		68	210
Tuscaloosa Formation:			
Clay: gray, micaceous, sandy		8	218
Sand: fine to coarse-grained, massive, angular, arkosi monitic			308
Sand: as above, but much coarser-grained; interbedded gray to red (mottled), micaceous, sandy	• •	92	400

#### 2

Thickness Depth (feet) (feet)

Summary:

Tertiary (undifferentiated)	20	20
Upper Cretaceous (Providence sand)	90	110
Upper Cretaceous (Ripley, Cusseta, Blufftown and Eutaw, un-		
differentiated)	100	210
Upper Cretaceous (Tuscaloosa formation)	190	400

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	10	110
Sand: fine to coarse-grained	<b>34</b>	176
Sand: fine to coarse-grained	14	206
Sand: fine to coarse-grained	18	<b>240</b>
Sand: fine to coarse-grained	33	281
Sand: fine to coarse-grained	14	302
Sand: fine to coarse-grained	40	380

#### HOUSTON COUNTY

Location: Southwest part of City of Warner Robins	Well No.: GGS 374	
Owner: No. 2 City of Warner Robins	Elev.: 239	
Driller: Layne-Atlantic Company		
Drilled: February 1954		
	Thickness Dept (feet) (feet	

#### Summary:

Tertiary (undifferentiated)	36	36
Upper Cretaceous (Providence sand)	69	105
Upper Cretaceous (Ripley, Cusseta, Blufftown and Eutaw, un-		
differentiated)	105	210
Upper Cretaceous (Tuscaloosa formation)	223	433

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	4	112
Sand: fine to coarse-grained	6	130
Sand: fine to coarse-grained	6	146
Sand: fine to coarse-grained	16	172
Sand: fine to coarse-grained	10	194
Sand: fine to coarse-grained	58	290
Sand: fine to coarse-grained	82	382
Sand: fine to coarse-grained	39	<b>43</b> 3

# Remarks:

Samples of poor quality, hence formational tops estimated from electric log of the above well.

#### HOUSTON COUNTY

# Location: At City Water Works, PerryWell No.: GGS 414Owner: No. 5 City of PerryElev.: 295Driller: Layne-Atlantic CompanyThicknessDrilled: March 1955Thickness(fort)

	(feet)	(feet)
Middle and Lower Eocene (Undifferentiated):		
Sand: fine to medium-grained; and clay, gray	. 7	7
Sand and clay: as above; with considerable amount of clay, dark-gray, micaceous, lignitic	13	20
Clay (or kaolin): light-gray to white, sandy	22	42
Paleocene: Midway Group: Clayton Formation:		
Clay: dark-gray to black, lignitic, pyritiferous	. 8	50
Upper Cretaceous: Providence Sand:		
Clay (or kaolin): white to red (mottled), sandy, micaceous; interbedded sand, fine to coarse-grained, angular, arkosic, limonitic	100	150
Sand: fine to coarse-grained, angular, arkosic, limonitic		. 190
Ripley and Cusseta (Undifferentiated):		
Clay: gray, sandy, micaceous, somewhat lignitic, pyritifer- ous; interbedded sand, fine to coarse-grained, angular, ar- kosic	. 70	260
Sand: fine to coarse-grained, rather massive (at certain hori- zons), arkosic; interbedded clay (or kaolin), white to gray to red (mottled), micaceous, sandy	228	488
Summary:		

# Middle and lower Eocene (undifferentiated)4242Paleocene (Clayton formation)850Upper Cretaceous (Providence sand)140190Upper Cretaceous (Ripley and Cusseta, undifferentiated)298488

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	<b>26</b>	180
Sand: fine to coarse-grained	192	454

# **IRWIN COUNTY**

Decentration and the second seco	Well No.: GGS 274 Elev.: 330	
Drined. March 1992	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		30
Clay: yellowish-green, sandy		70
Sand: fine to coarse-grained, angular, arkosic		90
Clay: yellowish-green, sandy; interbedded sand, as about limestone, white, sandy	7e;	170
Sand: fine to coarse-grained, angular		230
Oligocene (Undifferentiated): Limestone: white to light-gray, very dense, highly calcitiz crystalline, cherty, sandy, fossiliferous (bryozoan remai and Foraminifera) Rotalia mexicana var. at 230-240.	ns,	300
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, much calcitized (more so at depth), cryst line, fossiliferous (bryozoan remains and Foraminifera certain levels) Operculinoides floridensis at 300-310.	at	500
Limestone: as above; interbedded dolomitic limestone, brov saccharoidal, rather massive		6 <b>3</b> 0
Summary:		
Miocene (undifferentiated)		230
Oligocene (undifferentiated)		300
Upper Eocene (Ocala limestone)		630
Potential Water-Bearing Zones:		
Limestone	240	470

#### JEFF DAVIS COUNTY

	JEFF DAVIS COUNTY	
Location: Hazelhurst, 0.1 mi. north of U.S. Highway 341, few hundred yd. east of Georgia-Florida R.R., at City Water Works Owner: No. 3 City of Hazelhurst Driller: Layne-Atlantic Company	Well No.: GGS 15 Elev.: 259	7
Drilled: June 1948		
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		20
Sand: medium-grained, angular, arkosic; and clay, as a	above	55
Clay: yellowish-green, sandy, cherty at certain levels bedded sand, fine to medium-grained, angular, arkosi phatic (at depth)	c, phos-	360
Gray phosphate pebbles at 200-260.		
Clay: light-gray, sandy, phosphatic; interbedded lin white, dense, sandy	nestone, 	440
Limestone: light-gray to white to light-brown, dolomit depth, dense, sandy, fossiliferous at certain levels		557
Oligocene (Undifferentiated):		
Limestone: light-gray, nodular, dense, crystalline, somewhat fossiliferous (echinoid and bryozoan r Ostracods, and Foraminifera)	emains,	567
Elphidium sp., Rotalia mexicana var., Asterigerin acuta, Quinqueloculina sp. at 557-567.	ıa sub-	
Limestone: brown, nodular, rather dense, much calcitiz siliferous (as above)		670
Coskinolina? <sup>1</sup> sp. at 567-587.		
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, rather soft, granular (in texture) iferous (echinoid and bryozoan remains and "large minifera" at certain levels)	r Fora-	840
Lepidocyclina sp. at 760-810.		
Summary:		
Miocene (undifferentiated)	557	557
Oligocene (undifferentiated)		670
In upper Eocene (Ocala limestone)		840

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

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Well Logs of the Coastal Plain of Georgia		235
Potential Water-Bearing Zones:	Thickness (feet)	Depth (feet)
Limestone		840

#### Remarks:

Sample intervals too great to permit accurate determination of formational top of upper Eocene (Ocala limestone).

#### JEFFERSON COUNTY

Location: Few hundred yards west of U.S. Highway	Well No.: GGS 133	
1, south side of Quakel Street, in Wrens	Elev.: 445	
Owner: No. 2 U.S. Geological Survey test hole		
Driller: J. K. Scott Drilling Company		
Drilled: July 1946		
	Thiskness Do	n + h

(Teet)	(leet)
(feet)	(feet)
Thickness	s Depth

# Miocene (Undifferentiated):

Clay: light-gray to red to purple (mottled), sandy, limonitic	20	20
Clay: yellowish-green to red (somewhat mottled), blocky, sandy, limonitic	10	30
Sand: fine to coarse-grained, subangular, arkosic	20	50
Upper Eocene: Jackson Group: Barnwell Formation:		
Clay: white to light-gray, somewhat indurated, very sandy	20	70
Sand: fine to coarse-grained, angular; clay, light-gray	10	80
Clay: yellowish-green to tan (mottled), somewhat indurated, blocky, sandy	30	110
Sand: fine to coarse-grained, angular, arkosic	30	140
Clay: dark-green, sandy, carbonaceous, fossiliferous (Fora- minifera) Valvulineria jacksonensis abundant, Nonion advena at 140-	10	150
150. Middle Eocene: Claiborne Group (Undifferentiated): Clay: light-gray to chocolate-brown, carbonaceous, micaceous,		
sandy	10	160

Clay: as above; and indurated clay, dark-green, carbonaceous,		
micaceous (finely disseminated)	<b>25</b>	185

#### Upper Cretaceous: Tuscaloosa Formation:

Kaolin: light-gray to pink (mottled), sandy, micaceous	<b>65</b>	250
Sand: fine to medium-grained, angular; kaolin, mottled, sandy, micaceous	20	270
Sand: fine to coarse-grained, arkosic	20	290
Sand: fine to coarse-grained; clay, gray to yellowish-green, sandy, micaceous	50	340
Clay or kaolin: light-gray, micaceous (sericitic)	10	350
Sand: fine to coarse-grained; clay, gray, sandy, micaceous	130	480
Clay; pale-green to white, micaceous	20	500
Sand: fine to coarse-grained, arkosic	49	549

#### Summary:

Miocene (undifferentiated)	50	50
Upper Eocene (Barnwell formation)	100	150
Middle Eocene (Claiborne group, undifferentiated)	35	185
Upper Cretaceous (Tuscaloosa formation)	364	54 <b>9</b>

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	30	140
Sand: fine to coarse-grained	<b>20</b>	290
Sand: fine to coarse-grained	10	510

# JEFFERSON COUNTY

Owner: City of Louisville Elev.:		lo.: GGS 219 3001	
Drilled: March 1952	r.	fhickness (feet)	Depth (feet)
No samples		25	25
In Upper Eocene: Jackson Group: Barnwell Formation: Marl: yellowish-green to gray, silty, somewhat indum depth, fossiliferous (Foraminifera); interbedded sa to coarse-grained, angular	rated at nd, fine	92	117
Nonion advena at 25. Valvulineria jacksonensis at 75. Angulogerina ocalana prominent at 95.			
Limestone prominent at 102-107.			

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

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		237
ortille France Cleikerne Creen (II-differentieted).	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: white to gray, argillaceous, sandy, micaceous, car- bonaceous, fossiliferous (macroshells and bryozoan re- mains); clay, brown, micaceous, lignitic	5	122
Marl: dark-green, somewhat indurated, sandy, phosphatic (finely disseminated), carbonaceous, fossiliferous (Fora- minifera); interbedded sand, fine to coarse-grained, angu- lar, phosphatic	58	180
Buliminella robertsi, Cibicides westi at 155.		
Sand: fine to medium-grained, angular, abundantly glaucon- itic; interbedded marl, dark gray, silty, coarsely glauco- nitic, fossiliferous (Foraminifera at certain horizons)	67	247
Valvulineria jacksonensis var. at 195. Anomalina sp. at 225.		
Clay: dark-green to brown, fissile, lignitic; inclusions of kao- lin, light-gray, somewhat indurated, sandy, micaceous, ligniti	ic 4	251
Lignite abundant at 250.		
Summary:		
No samples		25
In upper Eocene (Barnwell formation)		117
Middle Eocene (Claiborne group, undifferentiated)		251
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	10	117
Sand: fine to coarse-grained		127
Sand: fine to medium-grained		210
JEFFE	RSON CO	UNTY
way 1, 8th Military District Owner: No. 1 Enola Kelly Driller: Owen Hembree	o.: GGS 4	80
Drilled: October 1955	Thickness	Depth
	(feet)	(feet)
Miocene (Undifferentiated):		
Clay: brick-red, sandy, limonitic	20	20
Sand: fine to medium-grained, phosphatic (finely dissemi- nated)	10	30

238	GEORGIA GEOLOGICAL SURVEY BULLETIN 70		
	2	Thickness (feet)	Depth (feet)
Upper Eocene: J	Jackson Group: Barnwell Formation:	(1000)	(leet)
noid and bry	yellowish-green, fossiliferous (macroshells, echi- yozoan remains, and Foraminifera); interbedded o coarse-grained	80	110
Valvulineria	ı jacksonensis at 30-40.		
	ght-gray, massive, saccharoidal, sandy, sparsely fossiliferous (casts and molds of megafossils)	10	120
Sand: fine to r	medium-grained, angular, sparsely phosphatic	10	130
Middle Eocene:	Claiborne Group (Undifferentiated):		
phatic, fossi	cl: dark-green, sandy, coarsely glauconitic, phos- iliferous (fragments and molds of megafossils, l bryozoan remains, Ostracods, and Foraminifera)	20	150
Nonion adve 150.	ena, Cibicides americanus var. antiquus at 140-		
sandy, spars	ray to yellowish-green, massive, saccharoidal, sely phosphatic, fossiliferous (fragments and egafossils)	20	170
No samples		10	180
Sand: fine to r	medium-grained, angular, phosphatic	20	200
Ç	reen, somewhat indurated and fissile, glaucon- dded sand, fine to medium-grained, angular	70	270
Glauconite a	and siderite nodules prominent at 230-240.		
	coarse-grained, phosphatic; interbedded clay, fissile, carbonaceous, micaceous	50	320
Upper Cretaceou	is: Tuscaloosa Formation:		
	coarse-grained; and clay, green to red (mottled),	10	330
Sand: fine to	coarse-grained, limonitic	70	400
pyritiferous;	grained, angular, arkosic, limonitic, sideritic, ; interbedded kaolin, white to gray to red nicaceous	350	750
Kaolin (mot	tled) and siderite nodules prominent at 400-410.		
	Summary:		

#### Miocene (undifferentiated) Upper Eocene (Barnwell formation) Middle Eocene (Claiborne group, undifferentiated) Upper Cretaceous (Tuscaloosa formation)

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to medium-grained		130
Sand: fine to medium-grained		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 Drilled: June 1957		o.: GGS 53 180 <sup>2</sup>	2
		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine to coarse-grained, angular, arkosic; clay, b sandy, limonitic	,	30	30

#### Oligocene(?) (Undifferentiated):

I	imestone: white, crystalline, saccharoidal, very sandy,		
	coarsely glauconitic, fossiliferous (fragments and molds of megafossils, and echinoid and bryozoan remains); inter-		
	bedded 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, some-		
what saccharoidal, sandy, sparsely phosphatic, glauconitic,		
fossiliferous (fragments and molds of megafossils)	185	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>1</sup>Average elevation based on Georgia State Highway Maps.

	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		· · ·
Marl: gray to yellowish-green, somewhat indurated, phatic (finely disseminated), glauconitic at depth, iferous (macroshells, Radiolaria, Ostracods and For fera); interbedded sand, fine to coarse-grained, an phosphatic; and limestone, white, sandy, coarsely gl- itic, fossiliferous (macroshells, echinoid and bryozo mains)	fossil- amini- Igular, aucon- an re-	320
Cibicides americanus var., Radiolaria at 250-260.		
Asterigerina texana, Cibicides westi at 280-290.		
Macroshells prominent at 290-300.		
Sand: fine to coarse-grained, angular, phosphatic		410
Summary:		
Pliocene to Recent (undifferentiated)		30
Oligocene(?) (undifferentiated)		65
Upper Eocene (Barnwell formation)		250
Middle Eocene (Claiborne group, undifferentiated)		410
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		250
Sand: fine to coarse-grained		410
	JEFFERSON CO	OUNTY
Location: In LouisvilleWell No.: GOwner: City of LouisvilleElev.: 3001Driller: Virginia Supply and Well CompanyElev.: 3001		54
Drilled: April 1958	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, angular, arkosic; and clay, brown, lignitic		25
Upper Eocene: Jackson Group: Barnwell Formation:		
Marl: gray to yellowish-green, silty, fossiliferous (Ost and Foraminifera)		85
Nonion advena, Nonion inexcavatus at 30. Valvulineria jacksonensis at 50.		
<sup>1</sup> Average elevation based on Georgia State Highway Mans.		

240

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

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		<b>241</b>
	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, angular	10	95
Limestone: gray to cream, nodular, saccharoidal, glauconitic, fossiliferous (casts and molds of megafossils, echinoid and bryozoan remains)	10	105
Sand: fine to coarse-grained, angular	10	115
Middle Eocene: Claiborne Group (Undifferentiated):		
Marl: gray to light-brown, carbonaceous, micaceous; inter- bedded limestone, gray to light-brown, saccharoidal, sandy, micaceous, carbonaceous, phosphatic (finely disseminated), fossiliferous (casts and molds of megafossils)	80	195
Discorbis sp., Cibicides americanus var. at 120.		
Glauconite prominent at 165.		
Clay: dark-brown to black, somewhat fissile, carbonaceous, micaceous; and sand, fine to coarse-grained, angular		285
Sand: coarse-grained, subangular, limonitic	50	335
In Upper Cretaceous: Tuscaloosa Formation:		
Sand: coarse-grained, limonitic, pyritiferous, arkosic; inter- bedded clay, yellowish-green to light-brown, somewhat iron- stained and mottled, micaceous, sideritic		370
Sideritic nodules at 335.		
Summary:		
Pliocene to Recent (undifferentiated) Upper Eocene (Barnwell formation)		$25 \\ 115$
Middle Eocene (Claiborne group, undifferentiated)		335
In Upper Cretaceous (Tuscaloosa formation)	35	370
Potential Water-Bearing Zones:		
Sand: coarse-grained	50	335

# JENKINS COUNTY

		0111
	No.: GGS .: 185 <sup>1</sup>	5 227
	Thickness (feet)	Depth (feet)
		<u> </u>
Miocene (Undifferentiated):		
Sand: fine to medium-grained, phosphatic, finely disseminated phosphatic grains; interbedded clay, light-gray to black, lig- nitic, micaceous	3	3
		-
Sand: fine to medium-grained; interbedded clay, tan, sandy	. 22	25
Upper Eocene: Jackson Group: Cooper Marl:		
Marl: cream, hard lime nodules, fossiliferous (macroshells, abundant echinoid and bryozoan remains, Ostracods, and Foraminifera); and clay, dark brown, lignitic	95	120
Discorbis alveata, Discorbis assulata, Spirillina sp., Planu- laria truncana, Siphonina jacksonensis, Nodosaria fissicos- tata, Cibicides lobatulus at 70-75.		
Marginulina cocoaensis, Guttulina spicaeformis, Globulina gibba, Robulus limbosus var., Spiroplectammina mississip- piensis var., Saracenaria sp., Planularia truncana, Eponides jacksonensis, Cibicides mississippiensis at 75-120.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Sand: fine to medium-grained, phosphatic, angular	130	250
Limestone: light-gray, very dense (highly calcitized), sandy, phosphatic, fossiliferous (macroshells and rare Ostracods and Foraminifera)	59	309
a		
Summary:		
Miocene (undifferentiated)		25 120
Upper Eocene (Cooper marl) Middle Eocene (Lisbon formation)		309
		•••
Potential Water-Bearing Zones:		
Sand: fine to medium-grained	40	250
Sana and to mouran Branda and	40	100

Average elevation based on Georgia State Highway Maps.

#### LANIER COUNTY

Owner: City of Lakeland Elev Driller: Layne-Atlantic Company		S 346
Drilled: May 1953	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, inclusions of kaolin; into bedded with clay, light-gray to yellow to red (mottled), ve sandy, limonitic	ery	64
Miocene (Undifferentiated):		
Clay: light-gray or olive-green, somewhat indurated, cher phosphatic (white phosphatic pebbles)	• /	84
Sand: fine to medium-grained, phosphatic		94
Clay: light-gray to white, indurated, sandy, carbonaceous		105
Limestone: light-gray to white, dense (much calcitized sandy, finely disseminated phosphatic grains		125
Clay: turquoise-blue, somewhat indurated, tough, sandy		154
Dolomitic limestone: light-brown, saccharoidal, phosphatic		223
Oligocene (Undifferentiated):		
Limestone: light-gray to cream, dense (much calcitized), noc lar, fossiliferous (Foraminifera)		331
$Pyrgo$ sp., $Dictyoconus^2$ sp. at 223. Miliolidae prominent at 280-302.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, very dense (highly calcitized), massi fossiliferous (bryozoan and echinoid remains, macroshel and some Foraminifera)	lls,	350
Operculinoides sp. at 331-350.		
Summary:		
Pliocene to Recent (undifferentiated)		64

Pliocene to Recent (undifferentiated)	64	64
Miocene (undifferentiated)	159	223
Oligocene (undifferentiated)	108	331
Upper Eocene (Ocala limestone)	19	350

<sup>1</sup>Average elevation based on Georgia State Highway Maps. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

		Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:			
Sand: fine to medium-grained			94 350
I	LAU	RENS CO	UNTY
Location: Dublin	Well	No.: GGS	438
- · · · · · · · · · · · · · · · · · · ·	Elev.	: 198	
Driller: Layne-Atlantic Company Drilled: May 1955			
		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: coarse-grained, angular, arkosic; clay, light-gray red (mottled), sandy, limonitic; residual limestone, white yellow, iron-stained, dense, crystalline, cherty, sandy, f siliferous (fragments, casts and molds of megafossils, ec noid and bryozoan remains, and some Foraminifera)	e to los- chi-	5	Б
Oligocene (Undifferentiated):			
Limestone: white to yellow, dense, crystalline, cherty, san (sandier at depth), fossiliferous (fragments, casts a molds of megafossils, echinoid and bryozoan remains, a Foraminifera); interbedded clay, olive-green to tan, sand	and and	40	45
Quinqueloculina sp., Pyrgo sp., Asterigerina cf. A. subac at 5-28.	uta		
$Gypsina \ globula^1$ at 28-35.			
Indurated sand: fine-grained			52
Upper Eocene: Jackson Group: Barnwell Formation:			
Marl: gray, silty, fossiliferous (Foraminifera)		18	70
Discorbis cocoaensis, Nonion advena, Nonion inexcavat Cibicides lobatulus at 52-56.	tus,		
Nonion advena common, Valvulineria jacksonensis ab dant at 56-65.	un-		
Limestone: cream, dense, crystalline, very sandy			90
Marl: gray, silty, fossiliferous (Foraminifera)			168
Limestone: light-gray to white, somewhat saccharoic coarsely glauconitic, fossiliferous (macroshells, echin and bryozoan remains and Foraminifera)	oid	32	200
Gypsina globula, Operculinoides floridensis, Lepidocycl sp., Asterocyclina sp. at 176-200.	ina		

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

Well Logs of the Coastal Plain of Georgia		245
	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: gray, dense, saccharoidal, sandy, micaceous, phos- phatic (finely disseminated), fossiliferous (fragments, casts and molds of megafossils, and Foraminifera)		220
Gyroidina soldanii var., Nonion advena, Cibicides ameri- canus var., Cibicides cf. C. refulgens at 206-216.		
Marl: dark-green, silty, fossiliferous (Ostracods and Fora- minifera)	60	280
Nonion micrus, Cibicides americanus var., Cibicides westi at 235-245.		
Sericitic clay: yellowish-green to pink, prominent at 245-267.		
Limestone: gray to dark-green, argillaceous, dense, carbona- ceous, micaceous, coarsely glauconitic, sandy, fossiliferous (fragments, casts and molds of megafossils); interbedded sand, fine to medium-grained, lignitic, phosphatic; and clay, dark-green to brown, somewhat indurated	94	374
Macroshells prominent at 318-328.		
Sand: medium to coarse-grained, angular, phosphatic	30	404
Upper Cretaceous: Tuscaloosa Formation:		
Sand: coarse-grained, angular, limonitic; interbedded kaolin, gray to red (mottled), micaceous, sandy		420
Sand: fine to coarse-grained, angular		444
Kaolin: gray to red (mottled), micaceous	. 24	468
Sand: coarse-grained, angular, sideritic	102	570
Siderite nodules prominent at 478-490.		
Sand: fine to coarse-grained, angular, sideritic; interbedded clay (or kaolin), gray to red, micaceous, sandy	165	735
Summary:		
Pliocene to Recent (undifferentiated) Oligocene (undifferentiated)		5 52

Upper Eocene (Barnwell formation)

Middle Eocene (Claiborne group, undifferentiated)

Upper Cretaceous (Tuscaloosa formation)

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		404
Sand: fine to coarse-grained	. 24	444
Sand: fine to coarse-grained		570
Sand: fine to coarse-grained	. 23	6 <b>26</b>
Sand: fine to coarse-grained	. 16	672
Sand: fine to coarse-grained	. 30	720

LEE COUNTY

dred yards north of caretaker's residence in Chehaw E State Park	Vell No.: GG Slev.: 216	S 74
Owner: No. 1 Chehaw State Park Drilled: January 1937		
	Thickness (feet)	Depth (feet)
In Residuum:		
Sand: coarse-grained, angular		37
No samples		50
In Upper Eocene: Jackson Group: Ocala Limestone: Limestone: cream, nodular, much calcitized, glauconitic a depth, fossiliferous (macroshells, bryozoan remains an Foraminifera)	ıd	180
Operculinoides sp. at 60-70.		
Gypsina globula at 90-100.		
Amphistegina pinarensis var., Operculina mariannensis : 150-160.	at	
Middle Eocene: Claiborne Group: Lisbon Formation:		

Limestone: light-gray, dense, crystalline, sandy, coarsely glauconitic at depth, fossiliferous (fragments, casts and molds of megafossils, echinoid and bryozoan remains, and Foraminifera)	95	275
Cibicides pseudoungerianus var. lisbonensis at 210-220. Asterocyclina monticellensis, Asterigerina sp. at 220-230. Glauconite prominent at 250-260.		

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	WELL	LOGS	OF	THE	COASTAL	Plain	OF	GEORGIA
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	Thickness (feet)	Depth (feet)
Tallahatta Formation:		
Sand: fine to coarse-grained, angular, phosphatic, fossilifer- ous (common to abundant macroshells); interbedded marl, gray, silty, micaceous	105	380
Cibicides tallahattensis at 360-370.		
Limestone: gray, dense, sandy; marl, gray, silty, mica- ceous, glauconitic (finely disseminated), fossiliferous (Foraminifera)	30	410
Valvulineria jacksonensis var. at 380-390. Cibicides blanpiedi at 390-400.		
Sand: fine to medium-grained, subangular, phosphatic; inter- bedded marl, gray, silty, micaceous, fossiliferous (Fora- minifera)	40	450
Black phosphatic pebbles prominent at 410-420.		
Fish teeth prominent at 430-440.		
Limestone (or buhrstone): dark-gray to brown, very dense, crystalline, sandy, cherty; some marl, as above	20	470
Lower Eocene: Wilcox Group (Undifferentiated):		
Indurated sand: fine to coarse-grained, coarsely and abun- dantly glauconitic, fossiliferous (Foraminifera)	50	520
Valvulineria wilcoxensis, Cibicides howelli, Eponides dorfi at 480-490.		
Marl: dark-gray, silty, micaceous, carbonaceous	40	560
Sand: fine to coarse-grained, angular, green quartz grains	10	570
Paleocene: Midway Group: Clayton Formation:		
Indurated sand: fine to medium-grained, glauconitic, fossil- iferous (macroshells and Foraminifera); interbedded clay, black, fissile, carbonaceous, micaceous (finely disseminated)	50	620
Operculinoides catenula at 570-580. Discorbis midwayensis var. trinitatensis at 590-600.		
Limestone: light-gray, dense, crystalline, coarsely but sparse- ly glauconitic, fossiliferous (carrying fragments, casts and molds of megafossils and bryozoan remains)	100	720
Limestone: as above, but very sandy	10	730
Sand: medium-grained, angular	30	760

Upper Cretaceous: Providence Sand:	Thickness (feet)	Depth (feet)
Indurated sand: medium-grained, angular	30	790
Marl: gray, silty, chalky, fossiliferous (Foraminifera)		800
Anomalina pseudopapillosa at 790-800.		

#### Summary:

Residuum	37	37
No samples	13	50
In upper Eocene (Ocala limestone)	130	18 <b>0</b>
Middle Eocene (Lisbon formation)	95	275
Middle Eocene (Tallahatta formation)	195	470
Lower Eocene (Wilcox group, undifferentiated)	100	570
Paleocene (Clayton formation)	190	76 <b>0</b>
Upper Cretaceous (Providence sand)	40	800

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	105	380
Sand: fine to medium-grained	40	450
Sand: fine to coarse-grained	10	570
Limestone	100	729
Sand: fine to medium-grained	30	760

## LEE COUNTY

Location: Approximately 3.5 mi. northeast of center of Leesburg, 0.5 mi. south of Muckalee Creek bridge, east side of State Highway 195, about 20 ft. east of dwelling Owner: No. 1 Will Gillam	Well No.: GG Elev.: 265	5 270
Driller: F. P. Jones		
Drilled: February 1952		
-	Thickness (feet)	Depth (feet)
Residuum:		
Sand: fine to coarse-grained, angular, limonitic		25

#### Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: cream, dense, crystalline, much calcitized, some-		
what saccharoidal, porous at certain levels, fossiliferous		
(remains of macroshells, echinoids and bryozoa and some		
Foraminifera)	45	70

Operculina sp., Lepidocyclina sp. at 60-70.

## WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Summary:		
Residuum		25
Upper Eocene (Ocala limestone)	45	70
Potential Water-Bearing Zones:		
Limestone	- 45	70

### LEE COUNTY

mately 1 mi. east of State Highway 195, 0.25 mi. south Ele of east-west county road in bottom of valley Owner: No. 1 Farm Craft Association (Citizens Bank, Americus Driller: F. P. Jones	ll No.: GG v.: 267 s)	S 271
Drilled: February 1952	Thickness	Depth
	(feet)	(feet)
Residuum :		
Sand: fine-grained	25	25
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, much calcitized, rather massive, crystal- line and somewhat saccharoidal, fossiliferous (macroshells, echinoid and bryozoan remains, and some Foraminifera)	136	161
Operculina sp., Lepidocyclina sp. at 35-45.		
Summary:		
Residuum		25
Upper Eocene (Ocala limestone)	136	161
Potential Water-Bearing Zones:		
Limestone	136	161

.

## LEE COUNTY

,,,	Well No.: GGS	5 286
2.00 Stanto Control (Stanto) (	Elev.: 354	
Church, 0.5 mi. north of prominent curve in county road o	on west side of	f field
road, about 50 ft. north of dwelling		
Owner: Robert Snead		
Driller: F. P. Jones		
Drilled: March 1952		
	Thickness (feet)	Depth (feet)

## **Residuum:**

Clay: mottled, very sandy, limonitic	30	30
Clay: brown, very sandy, limonitic	15	45

## Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: white to cream, calcitized, somewhat crystalline and saccharoidal, fossiliferous (bryozoan remains and Foraminifera)	55	100
Operculina sp., Lepidocyclina sp. at 80-90.		
Sand: medium-grained, angular	39	139

### Summary:

Residuum	<b>45</b>	45
Upper Eocene (Ocala limestone)	94	139

# Potential Water-Bearing Zones:

Limestone	55	100
Sand: medium-grained	39	139

#### LEE COUNTY

Location: 6.5 mi. due east of Central of Georgia R.R. cross-	Well No.: GGS 29	9
ing in Leesburg via county road, 1 mi. north on north-	Elev.: 286	
south county road, west side of road at dwelling		
Owner: No. 1 Henrietta Hubert		
Driller: F. P. Jones		
Drilled: May 1952		
	Thickness Der (feet) (fe	oth et)

## **Residuum:**

Clay: mottled, sandy, limonitic	20	20
Clay: brown to black, lignitic, sandy	<b>20</b>	40

WELL LOGS OF THE COASTAL PLAIN OF GEOD	RGIA		251
	ſ	Shickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone			
Limestone: white to cream, calcitized, rather dense and cr talline, fossiliferous (macroshells, echinoid spines and f quent bryozoan remains, and Foraminifera)	re-	100	140
Operculina mariannensis at 40-50.			
Sand: medium to coarse-grained, angular		20	160
Summary:			
Residuum		40	40
Upper Eocene (Ocala limestone)		120	160
Potential Water-Bearing Zones:			
Limestone		100	140
Sand: medium to coarse-grained	<b>.</b>	20	160
	LEE	COUNT	Y
<b>A</b> (1)	Elev.	No.: GG : 303 <sup>Chickness</sup>	S 424 Depth (feet)
Residuum :			
Clay: bluish-gray to tan to red (mottled), very sandy, lime itic		20	20
Sand: fine to medium-grained, angular			30
band. The to heuran-gramed, angular		10.	00
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: yellow, iron-stained, much leached, very sand fossiliferous (megafossils, echinoid and bryozoan remai and Foraminifera)	ins	10	40
			56
Sand: fine to coarse-grained, angular		16	50
Gypsina globula, Eponides jacksonensis at 50-60.			
Middle Eocene: Claiborne Group: Lisbon Formation:			
Limestone: cream, sandy, glauconitic (finely disseminated fossiliferous (macroshells and bryozoan remains); into bedded marl, gray, silty, glauconitic (finely disseminated fossiliferous (Foraminifera)	er- 1),	18	74
Siphonina claibornensis, Gyroidina soldanii var., Cibicia americanus, Cibicides westi at 60-70.	les		

	Thickness (feet)	Depth (feet)
Sand: fine to medium-grained, angular; interbedded marl and limestone, as above	64	138
Tallahatta Formation:		
Marl: gray, silty, glauconitic (finely disseminated), fossilifer- ous (Foraminifera)	4	142
Planularia sp., Cibicides americanus var., Cibicides westi, Cibicides tallahattensis at 130-140.		
Sand: fine to coarse-grained, angular, phosphatic, fossilifer- ous (macroshells at certain levels); interbedded marl, gray, silty, glauconitic (finely disseminated), fossiliferous (Fora- minifera); and limestone, gray, dense, sandy, cherty, fos- siliferous (macroshells)	78	220
Macroshells prominent at 170-180.		
Valvulineria jacksonensis var., Siphonina claibornensis, Nonion advena, Cibicides tallahattensis, Cibicides blanpiedi at 170-180.		
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: tan to olive-green to red (mottled), dark-gray at depth, glauconitic, carbonaceous, micaceous, pyritiferous at depth.		300
Sand: fine to coarse-grained, angular, abundantly glauconitic, contains grains of pale-green quartz		325
Paleocene(?):		
Sand: as above; interbedded clay, light-gray, blocky, somewhat indurated, micaceous, carbonaceous		350
Paleocene: Midway Group: Clayton Formation:		
Clay: dark-gray, carbonaceous, micaceous; interbedded sand, fine to coarse-grained, angular, somewhat indurated; and limestone, light-gray, dense, crystalline, coarsely but sparse- ly glauconitic, sandy, fossiliferous (fragments, casts and molds of megafossils, bryozoan remains and Foraminifera).	34	384
Discorbis midwayensis, Valvulineria scrobiculata, Sipho- nina prima, Eponides lotus, Cibicides newmanae at 370-380.		
Limestone: light-gray to white, crystalline, coarsely but sparsely glauconitic, sandy, fossiliferous (as above)		430
Robulus midwayensis, Eponides lotus, Anomalina midway- ensis, Cibicides howelli at 380-390.		
No samples	50	480

WELL	LOGS	$\mathbf{0F}$	THE	COASTAL	Plain	OF	GEORGIA

Thickness Depth (feet) (feet)

#### In Upper Cretaceous: Providence and Ripley (Undifferentiated):

Marl: dark-bluish-gray, sandy, somewhat chalky, micaceous,<br/>pyritiferous, fossiliferous at certain levels (macroshells,<br/>Ostracods and Foraminifera); interbedded sand, fine to<br/>coarse-grained, angular, indurated, fossiliferous (a coquina<br/>at certain levels)210690Anomalina pseudopapillosa at 480-490.<br/>Gaudryina rudita at 620-630.690690

Vaginulina webbervillensis at 680-690.

#### Summary:

Residuum	<b>30</b>	30
Upper Eocene (Ocala limestone)	<b>26</b>	56
Middle Eocene (Lisbon formation)	82	138
Middle Eocene (Tallahatta formation)	82	220
Lower Eocene (Wilcox group, undifferentiated)	105	325
Paleocene(?)	<b>25</b>	350
Paleocene (Clayton formation)	80	430
No samples	50	480
In Upper Cretaceous (Providence and Ripley, undifferentiated)	210	690

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	18	160
Sand: fine to coarse-grained	25	325
Sand: fine to coarse-grained	10	350
Limestone	<b>46</b>	430
Sand: fine to coarse-grained	46	602

#### **Remarks:**

On the basis of the electric log, top of the Upper Cretaceous is probably at 460.

#### LIBERTY COUNTY

Location: 1.6 mi. northwest of County Courthouse at	Well No.: GGS 6
Hinesville, and about 200 yd. southwest of Taylors	Elev.: 91
Creek Rd. at Camp Stewart	
Owner: U. S. Government (War Department)	
Driller: Layne-Atlantic Company	
Drilled: November 1940	
	Thickness Depth (feet) (feet)

#### **Pliocene** to Recent (Undifferentiated):

Sand: fine to medium-grained, finely disseminated phos-		
phatic grains	100	100
Sand: coarse-grained, arkosic	50	150

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In Miocene (Undifferentiated):		Thickness (feet)	Depth (feet)	
Sand: coarse-grained, arkosic; and clay, o	dark-oreen, silty	100	250	
Limestone: white, sandy, phosphatic; sand			260	
· · · · · · · · · · · · · · · · · · ·	• •			
Clay: dark-green, silty, phosphatic		- 75	335	
Sand: fine to coarse-grained, phosphatic		_ 20	355	
No samples		. 40	395	
Clay: as above; dolomitic limestone, by sandy, phosphatic		40	435	
Dolomitic limestone: brown, saccharoidal,	sandy, phosphatic;			
limestone, white, very sandy, phosphati	с	10	445	
No samples		- 26	471	
Limestone: light-gray to white, dense sandy, phosphatic, fossiliferous (casts a fossils)	and molds of mega-	?	471	
No samples			491	
No samples	··	- 20	491	
In Oligocene (Undifferentiated):				
Limestone: as above; fragments of cream (much calcitized), fossiliferous (Foram		_ ?	491	
No samples		- 20	511	
In Upper Eocene: Jackson Group: Ocala Lir	nestone:			
Limestone: light-gray, saccharoidal (muc talline, fossiliferous (abundant bryoz Foraminifera)	zoan remains and	_ 305	816	
Operculinoides sp., Gypsina globula, sauensis at 511.	Asterocyclina nas-			
Amphistegina pinarensis var. at 730-75	0.			
Summary	7 •			
Pliocene to Recent (undifferentiated)		150	150	
In Miocene (undifferentiated)			471	
No samples			491	
In Oligocene (undifferentiated)	·······	?	491	
No samples			511	
In upper Eocene (Ocala limestone)		305	816	
Potential Water-Bearing Zones:				
Sand: coarse grained		50	150	

Sand: coarse-grained	50	150
Sand: fine to coarse-grained	20	355
Limestone	315	816

## Well Logs of the Coastal Plain of Georgia

LIBERTY COUNTY

Door of the second se	ell No.: GG ev.: 46	S 38
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: bluish-gray to red (mottled), sandy		10
Clay: brick-red, sandy	5	15
Sand: fine to coarse-grained, arkosic; interbedded clay, dark gray to black, lignitic, micaceous		40
Sand: fine-grained, argillaceous, finely disseminated phos phatic grains		45
Clay: gray to bluish-gray, somewhat indurated, blocky, phos phatic (brown phosphate pebbles)		55
Miocene (Undifferentiated):		
Clay: dark-green, silty, micaceous, reddish-brown phosphatic grains		300
Limestone: light-gray, very sandy, phosphatic, fossiliferous (fragments and impressions of megafossils)		307
Clay: as above, but much sandier	48	355
Limestone: white, dense, very sandy, phosphatic; interbed ded dolomitic limestone, light-brown, saccharoidal, sandy phosphatic	<b>,</b>	385
Oligocene (Undifferentiated):		
Limestone: gray, very dense (much calcitized), sandy, fos siliferous (casts and impressions of megafossils); scattered fragments of porous limestone, cream, fossiliferous (Fora minifera)	1-	410

Rotalia mexicana var. at 385-390.

### Summary:

Pliocene to Recent (undifferentiated)	55	55
Miocene (undifferentiated)	330	385
Oligocene (undifferentiated)	25	410

Thickness Depth (feet) (feet)

### **Potential Water-Bearing Zones:**

None observed to 410.

#### **Remarks:**

Well reportedly reached a total depth of 508.

### LIBERTY COUNTY

Location: 7 mi. northwest of Liberty County Courthouse	Well No.: GG	S 66
at Hinesville, about 1,600 ft. northeast of Taylors Creek	Elev.: 88	
Rd., at Camp Stewart		
Owner: U.S. Government (War Department)		
Driller: Virginia Machine and Well Company		
Drilled: October 1940		
	Thickness	Depth

(feet)	(feet)

#### Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, phosphatic (finely dissemi- nated); interbedded clay, dark-gray, lignitic, micaceous	80	80
Sand: very coarse-grained, rounded		145
Sand: fine-grained	50	195
In Miocene (Undifferentiated):		
Clay: dark-green, silty, phosphatic	50	245
Clay: pale to dark-green, somewhat indurated, sandy, phos- phatic	110	355
Clay: dark-green, very sandy, phosphatic	10	365
Sand: very coarse-grained	5	370
Sand: fine to coarse-grained, phosphatic; limestone, white, dense (much calcitized), very sandy, phosphatic, fossilifer- our (casts and molds of megafossils)	70	440
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic	5	445
Limestone: white to light-gray, highly calcitized, sandy, phos- phatic	15	460
Quinqueloculina sp., Massilina sp. at 460.		
No samples	40	500

Well Logs of the Coastal Plain of Georgia	L Contraction of the second seco	257
In Upper Eocene: Jackson Group: Ocala Limestone:	Thickness (feet)	Depth (feet)
Limestone: light-gray, crystalline (much calcitized), fossili- ferous (bryozoan remains and Foraminifera)	?	500
Gypsina vesicularis, Operculinoides sp., Asterocyclina sp. at 500.		
Summary:		
Pliocene to Recent (undifferentiated)	195	195
In Miocene (undifferentiated)		460
No samples	40	500
In upper Eocene (Ocala limestone)	?	500

## Potential Water-Bearing Zones:

Limestone		55	<b>50</b> 0
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#### LIBERTY COUNTY

Location: 1.7 mi. northwest of Liberty County Courthouse at Hinesville, 1,900 ft. northeast of Taylors Creek Rd., at Camp Stewart	Well No.: GGS 72 Elev.: 86
Owner: U.S. Government (War Department) Driller: Layne-Atlantic Company Drilled: December 1940	
	Thickness Depth (feet) (feet)

## **Pliocene to Recent (Undifferentiated):**

Sand: fine-grained, phosphatic (finely disseminated)	100	100
No samples	20	120
Sand: coarse-grained, arkosic	62	182

### In Miocene (Undifferentiated):

Clay: dark-green, sandy, phosphatic; sand, fine to coarse-		
grained, arkosic	98	<b>280</b>
Clay: dark-green, phosphatic, cherty	40	320
No samples	20	340
Dolomitic limestone: light-brown, sandy, phosphatic; inter- bedded limestone, gray, dense (much calcitized), very		
sandy, phosphatic	100	440

Oligocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: as above; with fragments of limestone, white, dense (much calcitized), fossiliferous (casts of megafossils and Foraminifera)	70	510
Rotalia mexicana var. at 440-452.		
No samples		530
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, rather massive, much calcitized, fossilifer- ous (bryozoan remains, macroshells and Foraminifera)	120	650
Operculinoides floridensis, Asterocyclina sp. at 530-550. Asterocyclina nassauensis, Gypsina globula, Pseudophrag-		

mina flintensis at 550-570.

#### Summary:

Pliocene to Recent (undifferentiated)	182	182
In Miocene (undifferentiated)	258	440
Oligocene (undifferentiated)	<b>70</b>	510
No samples	<b>20</b>	530
In upper Eocene (Ocala limestone)		650

## **Potential Water-Bearing Zones:**

Limestone	210	6 <b>50</b>
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## LIBERTY COUNTY

Location: Long 81°20'45" W., Lat 31°41'15" N.	Well No.: GGS 363
Owner: No. 1 Jelks-Rogers	Elev.: 26
Driller: E. B. LaRue	(derrick floor)
Drilled: 1953	
	Thickness Depth (feet) (feet)

### Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, angular, finely disseminated black phosphatic grains; interbedded clay, dark-gray, silty, micaceous	80	80
Sand: coarse-grained, subangular, arkosic		110
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic	175	285
Claystone, dark-brown, dense, sandy, micaceous, prominent at 240-260.		

	Thickness (feet)	Depth (feet)
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic	45	<b>33</b> 0
Clay: dark-green, sandy, phosphatic		345
Limestone: white, massive, sandy, phosphatic, fossiliferous (fragments, casts and molds of megafossils)	30	375
Oligocene (Undifferentiated):		
Limestone: light-gray, somewhat chalky (weathered ?), nodu- lar, calcitized, fossiliferous (bryozoan remains and Fora- minifera)	90	465
Rotalia mexicana var. at 400-420.		
Asterocyclina <sup>1</sup> sp., Gypsina globula <sup>1</sup> at 440-460.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, rather massive, nodular (calcitized), fos- siliferous (macroshells, echinoid and bryozoan remains, and some Foraminifera)	335	800
Operculinoides cf. O. floridensis at 460-480.		
Gypsina globula at 480-500.		
Asterocyclina nassauensis at 500-520.		
Pseudophragmina flintensis at 520-540.		
Camerina striatoreticulata at 700-720.		
Amphistegina pinarensis var. at 740-760.		
Lepidocyclina (Polylepidina) antillea <sup>1</sup> at 1000-1020.		
Limestone: as above, but granular, loosely consolidated	240	1,040
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: white, massive, somewhat nodular (calcitized), coarsely but sparsely glauconitic, fossiliferous (macro- shells, echinoid and bryozoan remains and Foraminifera)	40	1,080
Asterocyclina monticellensis at 1040-1060. Discorbis inornatus at 1060-1080.		
Limestone: as above; and dolomitic limestone, gray to light- brown, saccharoidal, sparsely glauconitic, gypsiferous		1,300
Limestone: cream, granular, loosely consolidated, cherty	135	1,435
Chert abundant at 1320-1340.		

Reworked (?) fossil of middle Eocene age.

	Thickness (feet)	Depth (feet)
Tallahatta Formation:		
Marl: brownish-green, somewhat indurated, silty, glauconitic, micaceous, pyritiferous, fossiliferous (Foraminifera)	70	1,505
Cyclammina sp., Robulus alato-limbatus, Marginulina vaca- villensis, Gyroidina soldanii var., Reussella subrotundata, Valvulineria jacksonensis var., Cibicides pippeni var., Cibi- cides blanpiedi at 1460-1480.		
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: light-brown, argillaceous, somewhat granular and loosely consolidated, glauconitic, micaceous, cherty at depth.	175	1,680
Robulus sp., Eponides cf. E. dorfi at 1500-1520.		
Indurated sand: light-gray, medium-grained, coarsely but abundantly glauconitic; grades downward into limestone, cream to light-gray, much calcitized, rather dense, finely glauconitic (a pepper and salt appearance), cherty at cer- tain levels	160	1,840
Paleocene: Midway Group: Clayton Formation:		
Marl: dark-gray, somewhat indurated and tough, silty, coarse- ly glauconitic, micaceous, fossiliferous (Foraminifera); interbedded indurated sand, light-gray, fine-grained, mica- ceous, fossiliferous (Foraminifera)	60	1,900
Spiroplectammina wilcoxensis, Nodosaria affinis, Polymor- phina cf. P. cushmani, Guembelina sp., Anomalina acuta at 1860-1880.		
Robulus midwayensis at 1890-1900.		
Limestone: light-gray, rather dense, crystalline, sandy, coarsely glauconitic, fossiliferous (Foraminifera)	40	1,940
Robulus pseudo-mamilligerus, Robulus cf. R. turbinatus at 1900-1920.		
<ul> <li>Vaginulina longiforma at 1920-1940.</li> </ul>		
Limestone: gray, sandy, glauconitic; interbedded marl, gray, glauconitic, fossiliferous (Foraminifera)	155	2,095
Robulus midwayensis at 1960-1980.		
Limestone (or calcareous sandstone): gray, sandy	185	2,280

Well Logs of the Coastal Plain of Georgia		261
	Thickness (feet)	Depth (feet)
Upper Cretaceous: Post-Eutaw (Undifferentiated):		
Marl: gray to brown at depth, carbonaceous, somewhat fissile at depth, chalky, silty, much sandier at depth, micaceous, glauconitic, pyritiferous	<b>1,1</b> 90	3,470
Guembelina sp. at 2280-2290.		
Planulina taylorensis at 2740-2750.		
Kyphopyxa christneri at 3090-3100.		
Vaginulina texana at 3290-3300.		
Eutaw Formation (Restricted):		
Sand: fine to medium-grained, somewhat indurated, phos- phatic, fossiliferous (macroshells); interbedded clay, gray, micaceous, carbonaceous, somewhat fissile	145	3,615
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, yellowish-green to red to purple (mottled), sandy, micaceous	255	3,870
Clay (or shale): dark-gray to black, fissile, carbonaceous, micaceous (finely disseminated); interbedded sand, fine to coarse-grained, angular, arkosic	95	3,965
Indurated sand: fine to coarse-grained, glauconitic	20	3,985
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, yellowish-green to red to purple, greasy, sandy, mica-		
ceous	265	4,250
Basement Complex (Undifferentiated):		
Crystalline Rock	- 4	4,254
Summary:		
Pliocene to Recent (undifferentiated)	110	110
Miocene (undifferentiated)		375
Oligocene (undifferentiated)		465
Upper Eocene (Ocala limestone)		1,040
Middle Eocene (Lisbon formation)		1,435
Middle Eocene (Tallahatta formation) Lower Eocene (Wilcox group, undifferentiated)		$1,505 \\ 1,840$
Paleocene (Clayton formation)		1,840 2,280
Upper Cretaceous (post-Eutaw, undifferentiated)		2,280 3,470
Upper Cretaceous (Eutaw formation, restricted)		3,615
Upper Cretaceous (Tuscaloosa formation)		4,250
Basement complex (undifferentiated)		4,254

262	GEORGIA GEOLOGICAL SURVEY BULLETIN 70		
		Thickness (feet)	Depth (feet)
	Potential Water-Bearing Zones:		
Limestone		705	1,080

#### **Remarks**:

Overall quality of cuttings poor.

## LIBERTY COUNTY

Location: Taylors Creek, Camp Stewart	Well No.: GGS 460
Owner: U.S. Government (War Department)	Elev.: 50
Driller: M. M. Gray Drilling Company	
Drilled: 1955	
	Thickness De <b>pth</b> (feet) (feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine-grained, limonitic; interbedded clay, bluish-gray to tan to red (mottled), sandy	40	40
Sand: coarse-grained, rounded, arkosic; clay, dark-green, sandy, micaceous	100	140
In Miocene (Undifferentiated):		
Clay: dark-green, sandy, micaceous	40	180
Clay: as above; interbedded limestone, light-gray, saccha- roidal (much calcitized), sandy, phosphatic	30	210
Clay: bluish-gray, indurated, sandy, cherty; interbedded lime- stone, light-gray, saccharoidal (much calcitized), sandy, phosphatic, fossiliferous (casts and impressions of mega- fossils)	110	320
IOSSIIS) Limestone: gray to light-brown, saccharoidal (much calci- tized), sandy, phosphatic, dolomitized at certain levels, fossiliferous (fragments and casts of megafossils)		390
Oligocene (Undifferentiated):		
Limestone: cream, massive, nodular (much calcitized), fos- siliferous (Foraminifera)	20	410

Quinqueloculina sp., Rotalia mexicana var. at 390-400.

WELL LOGS OF THE COASTAL PLAIN OF GEORGL	Well	LOGS	$\mathbf{0F}$	THE	COASTAL	Plain	$\mathbf{OF}$	GEORGIA
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Upper Eocene: Jackson Group: Ocala Limestone:	Thickness (feet)	Depth (feet)
Upper Locene: Jackson Group. Ocala Liniestone.		
Limestone: cream to white, saccharoidal (much calcitized), crystalline, fossiliferous (macroshells, bryozoan remains and Foraminifera)	58	468
Asterocyclina nassauensis, Gypsina vesicularis, Operculin- oides floridensis at 410-420.		

Pseudophragmina flintensis at 450-460.

F

### Summary:

Pliocene to Recent (undifferentiated)	140	140
In Miocene (undifferentiated)	250	390
Oligocene (undifferentiated)	20	410
Upper Eocene (Ocala limestone)	58	468

# Potential Water-Bearing Zones:

Limestone			468
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	LIBERTY COUNTY
Location: 0.5 mi. south of Midway, on U.S. Highway 17, at firetower	Well No.: GGS 548 Elev.: 10
Owner: No. 1 State Forestry Department	
Driller: Bailey Drilling Company	
Drilled: 1957	

## Pliocene to Recent (Undifferentiated):

Sand: fine-grained, arkosic, phosphatic (finely disseminated).	10	10
Sand: fine to coarse-grained, rounded, arkosic; interbedded clay, dark-gray, to black, fissile, lignitic, micaceous	17	27
Clay: dark-gray, blocky, carbonaceous	15	42
Sand: very coarse-grained, rounded, arkosic	51	93
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic; interbedded sand, fine to coarse-grained, phosphatic	214	307
	214 83	307 390

264 GEORGIA GEOLOGICAL SURVEY BULLETIN 7	0	
Oligocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: light-gray, rather dense and crystalline (mu calcitized), nodular, fossiliferous (Foraminifera)		445
Rotalia mexicana var. at 390-400.		
Upper Eocene: Jackson Group: Ocala Limestone:		4
Limestone: light-gray to white, somewhat saccharoidal (mu calcitized), fossiliferous (bryozoan remains, Ostracods, a (Foraminifera)	and	554
Operculinoides sp., Asterocyclina nassauensis at 441-451.	100	004
Summary:		
Pliocene to Recent (undifferentiated)		93
Miocene (undifferentiated)		390
Oligocene (undifferentiated)		445
Upper Eocene (Ocala limestone)		554
Potential Water-Bearing Zones:		
Limestone		554
	LONG COUN	TY
wici	Well No.: GG Elev.: 69	S 67
Owner: No. 1 City of Ludowici Driller: Gray Well and Pump Company		
Drilled: June 1939		Danth
	Thickness (feet)	Depth (feet)
No samples		395
In Miocene (Undifferentiated):		
Limestone: light-gray, sandy, phosphatic, fossiliferous (mo and impressions of megafossils); sand, fine to mediu grained; dolomitic limestone, light-brown, saccharoidal, s	ım-	405
Oligocene (Undifferentiated):		
Limestone: gray, dense (much calcitized), fossilifer (Foraminifera); sand, as above		425
Rotalia byramensis var., Quinqueloculina sp. at 405-415. Operculinoides sp. at 415-425.		

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA 26	Well
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Limestone: cream, massive (much calcitized), nodular, some-	Thickness (feet)	Depth (feet)
what oolitic, fossiliferous (abundant Foraminifera)	10	435
Milialian I I I I I I I		

Miliolidae abundant at 425-435.

#### Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: white, dense (much calcitized), somewhat saccha-		
roidal, fossiliferous (bryozoan remains and Foraminifera)	150	585
Asterocyclina nassauensis, Pseudophragmina flintensis, Gyp-		

sina globula at 435-445.

#### Summary:

No samples	395	395
In Miocene (undifferentiated)	10	405
Oligocene (undifferentiated)	30	435
Upper Eocene (Ocala limestone)	150	585

#### **Potential Water-Bearing Zones:**

Limestone	180	585
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### LOWNDES COUNTY

Location: 12 mi. north of Valdosta on Highway 125	Well No.: GGS 15
Owner: U.S. Government (Moody Field) No. 2	Elev.: 236
Driller: U.S. Corps of Engineers	
Drilled: September 1941	

#### Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, phosphatic (finely dissemi- nated), kaolin inclusions	40	40
Clay: yellow, sandy, limonitic	25	65
Limonite prominent at 55-60.		
Sand: as above	5	70
Miocene (Undifferentiated):		
Clay: olive-green, sandy, somewhat limonitic, phosphatic,		
sandier at depth	15	85
Sand: fine to coarse-grained, phosphatic	20	105

Clay: gray to turquoise-blue, somewhat indurated, tough, sandy, phosphatic, cherty; interbedded limestone, light-gray to white, very sandy, sparsely phosphatic; claystone, light-

	Thickness (feet)	Depth (feet)
gray, sandy, cherty, sparsely phosphatic	90	195
Claystone prominent at 130-135.		
Limestone, light-gray to white, very sandy, sparsely phos- phatic at 145-160.		
Brown phosphatic pebbles abundant 185-190.		
Clay: white, calcareous, very sandy, fossiliferous (bryozoan remains and Foraminifera)	10	205
Elphidium? sp., Rotalia sp. at 195-200.		
Dolomitic limestone: light-brown, dense, saccharoidal, sandy	23	228
Oligocene (Undifferentiated):		
Limestone: light-gray, extremely dense (highly calcitized), somewhat saccharoidal, fossiliferous (macroshells, bryo- zoan remains, and Foraminifera)	147	375
Quinqueloculina sp. at 230-235. Dictyoconus <sup>1</sup> sp. at 260-265.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, massive, somewhat calcitized, fossiliferous (bryozoan remains, macroshells, and Foraminifera)		425
Operculinoides floridensis, Operculinoides sp., Lepidocyclina sp. at 375-380.		
Gypsina globula at 395-400.		
Pseudophragmina flintensis, Lepidocyclina sp. at 400-405.		
<i>a</i>		

## Summary:

Pliocene to Recent (undifferentiated)	70	<b>70</b>
Miocene (undifferentiated)	158	228
Oligocene (undifferentiated)	147	375
Upper Eocene (Ocala limestone)	50	425

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	20	105
Limestone	197	425

## WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

## LOWNDES COUNTY

Well No.: GGS 24

Driller: Winter Hardware Company Drilled: November 1941		
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: red, sandy, limonitic, finely phosphatic		60
Clay: ochre to yellow, sandy, abundantly limonitic		80
Clay: dark-green, very sandy, finely phosphatic		100
Miocene (Undifferentiated):		
Clay: light-gray to white, indurated, very sandy, carbo- naceous, cherty; interbedded limestone, white, sandy	100	200
Summary:		
Pliocene to Recent (undifferentiated)	100	100
Miocene (undifferentiated)	100	200

## **Potential Water-Bearing Zones:**

None observed to total depth (200).

Location: Barrett

Owner: Fred Schroer

## LOWNDES COUNTY

L	OWND	ES CO	UNTY
Owner: No. 1 J. W. Holloway E	ell No. lev.: 25		27
Driller: Winter Hardware Company Drilled: November 1941			
Drined: November 1941		ckness leet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Clay: mottled, sandy, limonitic		10	20
Clay: ochre, very sandy, limonitic		20	40
Sand: fine to medium-grained, argillaceous, inclusions of k	aolin	20	60
Miocene (Undifferentiated):			
Sand: fine to medium-grained, argillaceous; clay, gray, durated, sandy, phosphatic, cherty; limestone, white, den (much calcitized), sandy, carbonaceous	nse	20	80

	Thickness (feet)	Depth (feet)
Clay and limestone: as above		100
Limestone: white, sandy; and clay, gray, indurated, sandy		120
Clay: light-gray, indurated, sandy; and limestone, as above		140
Clay: as above; and dolomitic limestone, light-brown, saccha- roidal, sandy	20	160
Clay: light-gray to pale-green, sandy; and dolomitic lime- stone, as above	20	180
Oligocene (Undifferentiated):		
Limestone: light-brown to light-gray, dense (highly calci- tized), somewhat dolomitized(?), fossiliferous (Foramini- fera, macro-shells and bryozoan remains)	200	380
Miliolidae prominent at 200-220.		
$Dictyoconus^1$ sp. at 220-240.		
Upper Eocene(?): Jackson Group: Ocala Limestone:		
Limestone: light-gray, dense (much calcitized), fossiliferous (bryozoan remains and Foraminifera)	20	400
Operculinoides sp. at 380-400.		
Summary:		
Pliocene to Recent (undifferentiated)		60
Miocene (undifferentiated)		180
Oligocene (undifferentiated)		380
Upper Eocene (?) (Ocala limestone)	20	400
Potential Water-Bearing Zones:		
Limestone	220	400
LOW	NDES CO	UNTY
Location: 3 mi. west of Valdosta Well Owner: No. 1 Abligard Driller: Winter Hardware Company Drilled: April 1943	No.: GGS	40
Drined: April 1943	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, finely phosphatic, somewhat indurated; clay, ochre, sandy		20
Clay: gray to greenish-gray, sandy	20	40
<sup>1</sup> Reworked(?) fossil of middle Eocene age.		
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WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

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	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: gray to greenish-gray, sandy, phosphatic	20	60
Clay: as above, but much sandier	20	80
Claystone (indurated clay): pale-green, phosphatic, sandy, cherty	20	100
Sand: fine to coarse-grained, somewhat silicified; and clay- stone, as above	40	140
Limestone: white, rather soft, sandy	60	200
Summary:		
Pliocene to Recent (undifferentiated)	40	40
Miocene (undifferentiated)		200
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	40	140
·····		
LOW	NDES CO	UNTY
Location: 8 mi. west of Valdosta Well Owner: No. 1 C. C. Giddens Driller: Winter Hardware Company	No.: GGS	42
Drilled: January 1943		
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
	20	00
Clay: red to purple, sandy Clay: ochre, very sandy, abundantly limonitic		20 40
Miocene (Undifferentiated):		
Clay: light-gray, somewhat indurated, sandy, phosphatic, chert	y 40	80
Clay: as above; limestone, white, sandy	20	100
Limestone: white, sandy; clay, as above	40	140
Claystone: pale-green, cherty	20	160
Oligocene (Undifferentiated):		
Claystone: as above; limestone, light-brown to cream, rather dense (calcitized), fossiliferous (Foraminifera)	60	220

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

Summary:	Thickness (feet)	Depth (feet)
-	40	40
Pliocene to Recent (undifferentiated) Miocene (undifferentiated)		40 160
Oligocene (undifferentiated)		220
Potential Water-Bearing Zones:		
Limestone		220
	LOWNDES CO	UNTY
Location: 8 mi. north of Valdosta	Well No.: GGS	
Owner: No. 1 Walter Todd	Wen No., GGS	11
Driller: Winter Hardware Company		
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: light-gray to pink, very sandy, arkosic		20
Miocene (Undifferentiated):		
Clay: ochre, sandy, phosphatic		60
Sand: fine to medium-grained, angular, phosphatic		100
Clay: light-gray to pale-green, sandy, cherty; and lime white. sandy, much leached		120
Dolomitic limestone: light-brown, saccharoidal		220
Summary:		
Pliocene to Recent (undifferentiated)	20	20
Miocene (undifferentiated)		220
Potential Water-Bearing Zones:		
Sand: fine to medium-grained		100
Dolomitic limestone		220
	LOWNDES CO	UNTY
Location: In Bemiss		
Owner: No. 1 T. M. Dasher	Well No.: GGS Elev.: 251	10
Driller: Winter Hardware Company		
Drilled: 1941		
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: pink, sandy, finely phosphatic		40
Clay: ochre, sandy, abundantly limonitic		60

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: ochre to dark green, sandy, phosphatic		80
Sand: medium-grained		100
Sand: fine-grained, phosphatic; limestone, white, sandy		140
Clay: light-gray to pale-green, sandy; limestone, as abov	e 40	180
Oligocene (Undifferentiated):		
Sand: fine to coarse-grained, phosphatic; limestone, gray cream, dense (much calcitized), sandy, fossiliferous depth (macroshells, echinoid spines, and Foraminifera)	at	240
Quinqueloculina sp. at 200-240.		
No samples		260
Limestone: cream, soft, fossiliferous (Foraminifera)		278
Summary:		
Pliocene to Recent (undifferentiated)		60
Miocene (undifferentiated)		180
Oligocene (undifferentiated)	98	278
Potential Water-Bearing Zones:		
Sand: medium-grained		100
Limestone		278
L	OWNDES CO	UNTY
	Vell No.: GGS lev.: 250	79
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: ochre, sandy, abundantly limonitic		20
Clay: ochre, very sandy, finely phosphatic, argillaceous, o taining inclusions of kaolin		40
Miocene (Undifferentiated):		
Clay: as above, but phosphatic		50

 Clay: light-gray to pale-green, very sandy, phosphatic
 20
 70

 Sand: fine to medium-grained, somewhat argillaceous, phosphatic
 10
 80

 $\mathbf{271}$ 

	Thickness (feet)	Depth (feet)
Clay: light-gray, very sandy, phosphatic; limestone, white, sandy, much leached	10	90
Sand: fine to medium-grained; limestone, white, sandy, cherty		100
Limestone: dense (much calcitized), sandy		120
Sand: fine to coarse-grained, angular, phosphatic; limestone, as above	60	180
Oligocene (Undifferentiated):		
Limestone: gray to light-brown, somewhat dolomitized and		

Emissione. gray to nght-brown, somewhat dolomitized and		
saccharoidal; limestone, cream, dense (much calcitized),		
nodular, fossiliferous (Foraminifera)	20	200

Quinqueloculina sp. at 180-200.

#### Summary:

Pliocene to Recent (undifferentiated)	40	40
Miocene (undifferentiated)	140	180
Oligocene (undifferentiated)	<b>20</b>	200

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	30	150
Limestone	20	200

#### LOWNDES COUNTY

Location: Valdosta	Well No.: GGS 173
Owner: City of Valdosta	Elev.: 230 <sup>1</sup>
Drilled: 1947	Thickness Depth (feet) (feet)

#### Pliocene to Recent (Undifferentiated):

Sand: fine to coarse-grained, carbonaceous, limonitic	2	2
Clay: ochre to red (mottled), sandy, abundantly limonitic	18	20
Clay: light-gray to pink (mottled), sandy; limestone, white, dense (much calcitized), sandy	20	40
Clay: ochre, sandy, limonitic; limestone, as above	30	70
Clay and limestone: as above, containing inclusions of kaolin	20	90

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

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):	(2007)	(2000)
Clay and limestone: as above; clay, pale-green, sandy, phosphati	c 40	130
Limestone: white, sandy, cherty	20	150
Limestone: as above; interbedded clay, dark-green to tur- quoise-blue, indurated	40	190
Dolomitic limestone: light-brown, saccharoidal, sandy		195
Oligocene (Undifferentiated):		
Dolomitic limestone: as above; and limestone, light-gray, very dense (highly calcitized), cherty, nodular, fossiliferous at depth	. 175	370
Quinqueloculina sp., $Dictyoconus^2$ sp. at 205-235.		
Upper Eocene: Jackson Group: Ocala Limestone:		
~ Limestone: white to cream, much calcitized, massive, fossili- ferous (bryozoan remains and Foraminifera); interbedded dolomitic limestone	390	760
Gypsina globula, Operculinoides sp. at 370-390. Dolomitic limestone at 450-530 and 550-570. Amphistegina pinarensis var. at 590-610.		
Gypsiferous crystals common at 650-670.		
Dolomitic limestone at 670-710.		
Middle Eocene: Claiborne Group (Undifferentiated):		
Limestone: light-gray, extremely dense (highly calcitized), massive, somewhat nodular, fossiliferous (bryozoan re- mains and Foraminifera); interbedded dolomitic limestone, dark-brown, saccharoidal	58	818
Miliolidae prominent at 760-770. Asterocyclina sp. at 800-810.		
Summary:		
Pliocene to Recent (undifferentiated)		90
Miocene (undifferentiated)	105	195
Oligocene (undifferentiated)		370
Upper Eocene (Ocala limestone)		760
Middle Eocene (Claiborne group, undifferentiated)	58	818

# Potential Water-Bearing Zones:

Limestone	300	450

Reworked(?) fossil of middle Eocene age.

## LOWNDES COUNTY

Location: 4 mi. south of Lake Park Owner: No. 1 U.S. Bureau of Fisheries Driller: W. R. McGrew Drilled: 1929		No.: GGS : 145	179
Drilled: 1929		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine to coarse-grained, arkosic Sand: fine to medium-grained, finely phosphatic, argilla at depth	iceous		18 60
Miocene(?) (Undifferentiated):			
Clay: light-gray, indurated, sandy, cherty		15	75
No samples		20	95
In Oligocene (Undifferentiated):			
Limestone: light-gray, dense (highly calcitized), nodula siliferous (Foraminifera)		113	208
Quinqueloculina sp. at 95-110.			
Dictyoconus <sup>1</sup> sp. common at 200-208.			
Summary:			
Pliocene to Recent (undifferentiated) Miocene(?) (undifferentiated) No samples In Oligocene (undifferentiated)		15 20	60 75 95 208
Potential Water-Bearing Zones:			
Limestone		113	208
	LOW	NDES CO	UNTY
Location: 3 mi. southeast of Base (Moody Field), at Ordnance Site Owner: No. 3 Moody Air Field (U.S. Govt.) Driller: Winter Hardware Company		No.: GGS .: 202	182
Driller: winter Hardware Company		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Clay: mottled, sandy, arkosic, limonitic		15	15
<sup>1</sup> Reworked(?) fossil of middle Eocene age.			

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

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	Thickness (feet)	Depth (feet)
Clay: ochre, abundantly limonitic, sandy, sandier with in- creased depth		30
Sand: fine to coarse-grained, finer-grained at depth, angular, arkosic, finely phosphatic		45
Miocene (Undifferentiated):		
Sand: as above, but phosphatic	10	55
Clay: ochre to dark-green, indurated, sandy, phosphatic	10	65
Sand: fine-grained, phosphatic; limestone, white, sandy, much leached	10	75
Clay: gray to light-brown, sandy, phosphatic	10	85
Sand: fine-grained; limestone, as above	10	95
Clay: light-gray, indurated, sandy, cherty at depth; inter- bedded limestone, white, sandy; and sand, fine to medium- grained, phosphatic		150
Dolomitic limestone: light-brown, saccharoidal, sandy; sand, as above		155
Clay: white, very sandy, cherty; dolomitic limestone, as above		160
Limestone: white, very sandy, cherty, fossiliferous (macro- shells and Foraminifera)		175
Sorites sp. at 165-170.		
Oligocene (Undifferentiated):		
Dolomitic limestone: light-brown, saccharoidal; interbedded limestone, dense (highly calcitized), fossiliferous (Fora- minifera)		200
Rotalia byramensis var. at 190-195.		
Limestone: cream, dense (highly calcitized), fossiliferous (Foraminifera)	48	248
$Dictyoconus^1$ sp. at 200-205.		
Summary:		
Pliocene to Recent (undifferentiated)	- 45	45
Miocene (undifferentiated)	130	175
Oligocene (undifferentiated)	73	248
Potential Water-Bearing Zones:		

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

# LOWNDES COUNTY

	LOWNDES CO	JUNIT
Location: Valdosta Owner: No. 1 City of Valdosta Driller: Layne-Atlantic Company Drilled: 1949	Well No.: GGS	198
Drined: 1949	Thickness (feet)	Depth (feet)
No samples		176
In Miocene (Undifferentiated):		
Limestone: white, sandy; clay, pale-green, indurated, se cherty		192
Dolomitic limestone: light-brown, dense, saccharoidal, sa	.ndy 15	207
Oligocene (Undifferentiated):		
Limestone: cream, very dense (highly calcitized) fossi ous (bryozoan remains, macroshells, and Foraminifera		361
Rotalia byramensis var. at 207-212. Dictyoconus <sup>1</sup> sp. at 212-217. Gypsina globula <sup>1</sup> , Lepidocyclina <sup>1</sup> sp., Operculinoides at 327-332.	<sup>1</sup> sp.	
Summary:		
No samples		176
In Miocene (undifferentiated)		207
Oligocene (undifferentiated)	154	361
Potential Water-Bearing Zones:		
Limestone	154	361
	LOWNDES CO	OUNTY
Location: 7 mi. southeast of Valdosta Owner: No. 2 National Container Company Driller: Layne-Atlantic Company Drilled: 1954	Well No.: GGS	8 356
Dimed. 1504	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, limonitic, arkosic; clay, tled, sandy		10
Clay: light-gray to purple, very sandy, limonitic		20
<sup>3</sup> Reworked(?) fossil of middle Eocene age.		

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, limonitic, arkosic; clay, ochre,		
sandy	13	33
Clay: ochre, very sandy, abundantly limonitic	3	36
Sand: fine to medium-grained, angular, argillaceous, contain- ing inclusions of kaolin	14	50
Sand: coarse-grained, arkosic	5	55
Miocene (Undifferentiated):		
Clay: pale-green to turquoise to ochre, sandy, phosphatic	25	80
Phosphatic pebbles prominent at 55-70.		
Sand: fine to coarse-grained, phosphatic		100
Clay: light-gray to white, sandy, indurated (approaching a claystone), cherty at depth	40	140
Dolomitic limestone: light-brown, saccharoidal, sandy; and limestone, white, sandy	10	150
Summary:		
Pliocene to Recent (undifferentiated)		55
Miocene (undifferentiated)		150
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		100
Dolomitic limestone	10	150

## LOWNDES COUNTY

Location: 7 mi. southeast of Valdosta Owner: No. 1 National Container Company Driller: Layne-Atlantic Company Drilled: 1954	Well No.: GGS 404
	Thickness Depth (feet) (feet)

# **Pliocene to Recent (Undifferentiated):**

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Clay: pale-green to ochre to red (mottled), very sandy, limo- nitic	21	21
Clay: ochre, sandy	6	27
Sand: fine to medium-grained, argillaceous, angular	25	52

Missons (IIndifferentiated).	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated): Clay: dark-green to brown (somewhat mottled), cherty, sand	v 8	60
	-	00
Sand: fine-grained, phosphatic; clay, light-gray, somewhat indurated, sandy		65
Clay: light-gray, somewhat indurated, phosphatic, sandy	13	78
Sand: fine to medium-grained, phosphatic, argillaceous at dep	oth 22	100
Clay: light-gray, sandy; indurated clay, white, sandy, carbo- naceous; interbedded limestone at depth, white, sandy		133
Clay: pale-green to turquoise, somewhat indurated, sandy cherty		150
Clay: as above; dolomitic limestone, light-brown, saccha- roidal, sandy		160
Clay: white, indurated, sandy, carbonaceous; limestone, white sandy, fossiliferous (Foraminifera) Archaias sp. at 160-165.		180
Oligocene (Undifferentiated):		
Limestone: dense (highly calcitized), nodular, fossiliferous (macroshells and some Foraminifera)		316
$Dictyoconus^1$ sp., Rotalia by ramensis var. at 180-190.		
Summary:		
Pliocene to Recent (undifferentiated)	52	52
Miocene (undifferentiated)		180
Oligocene (undifferentiated)	136	316
Potential Water-Bearing Zones:		
Sand: fine to medium-grained		100
Limestone	136	316
LOV	WNDES CO	UNTY
Location: 4 mi. north of Post Office in ValdostaWellOwner: No. 1 Schroer Plant FarmElev.Driller: Duval Drilling Company		412
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		

Sand: line	τo	mealum-grained, gray to yellow, argillaceous,		
limonitic			5	5

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

WELL LOGS OF THE COASTAL	PLAIN	$\mathbf{OF}$	GEORGIA
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	Thickness (feet)	Depth (feet)
Clay: light-gray to purple (mottled), sandy, finely dissemi- nated phosphatic grains and kaolin inclusions	65	70
Miocene (Undifferentiated):		
Clay: yellow, olive-green at depth, sandy, phosphatic (light- gray pebbles); some sand, fine-grained	48	118
Claystone: white, sandy, abundant chert		123
Clay: pale-green, sandy, phosphatic; limestone, white, dense (much calcitized), sandy, somewhat carbonaceous		150
Clay: turquoise, indurated, tough, sandy, light-gray to trans- parent phosphatic? pebbles	37	187
Clay: turquoise, indurated, sandy; limestone, white to light- brown (dolomitized) at depth, very sandy, fossiliferous at depth (macroshells and bryozoan remains)	49	236
Macroshells at 200-207.		
Dolomitic limestone at 207-226.		
Oligocene (Undifferentiated):		
Limestone: light-brown to cream at depth, fossiliferous at dept Quinqueloculina sp. at 236-246. Rotalia bryamensis var. at 246-266.	h 127	363
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, dense (much calcitized,) fossiliferous (macroshells and some Foraminifera); interbedded dolo- mitic limestone in certain zones	137	500
Dolomitic limestone, dark-brown, saccharoidal at 363-370.		
Operculinoides sp. at 370-385. Pseudophragmina flintensis, Gypsina globula at 400-420. Camerina striatoreticulata (abundant), Asterocyclina nas- sauensis at 440-459.		
Summary:		
Pliocene to Recent (undifferentiated) Miocene (undifferentiated) Oligocene (undifferentiated) Upper Eocene (Ocala limestone)	166 127	70 236 363 500

## **Potential Water-Bearing Zones:**

Limestone 210	0 460
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# LOWNDES COUNTY

	10		
Location: In Valdosta Owner: No. 1 City of Valdosta Driller: M. M. Gray Drilling Company	Well Elev.	No.: GGS : 250	500
Drilled: 1955		Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine to medium-grained, coarser-grained at depth, sic, limonitic, finely disseminated phosphate grains, i sions of kaolin; interbedded clay, yellow to olive-gree purple (mottled), sandy, limonitic	inclu- en to	50	50
Miocene (Undifferentiated):			
Clay: pale-green to turquoise, light-gray to white at d somewhat indurated at depth, sandy, cherty, carbonac phosphatic (light-gray to brown pebbles); interbe limestone, white, sandy, carbonaceous	eous, edded	120	170
Light-gray to brown phosphatic pebbles prominent at 5 50-60.	50-60.		
Dolomitic limestone, light-brown, saccharoidal, sandy		10	180
Oligocene (Undifferentiated):			
Limestone: light-gray, dense (much calcitized), nodular siliferous (Foraminifera)		195	375
Rotalia sp. at 190-200. Quinqueloculina sp., Dictyoconus <sup>1</sup> sp. at 230-240.			
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: light-gray, fossiliferous (bryozoan remains some Foraminifera)			400
Operculinoides sp. at 370-380. Operculinoides sp. common, Lepidocyclina sp. at 390-4	00.		
Summary:			
Pliocene to Recent (undifferentiated)			50
Miocene (undifferentiated)		130	180
Oligocene (undifferentiated)			375
Upper Eocene (Ocala limestone)		25	400
Potential Water-Bearing Zones:			
Limestone		220	400
<sup>1</sup> Reworked(?) fossil of middle Eocene age.			

LOWNDES COUNTY

Location: In Valdosta Owner: No. 1 City of Valdosta Driller: M. M. Gray Drilling Company	Well	No.:	GGS	511
Drilled: 1955				
			kness eet)	Depth (feet)
Pliocene to Recent (Undifferentiated):				
Clay: light-gray to yellow to purple (mottled), sandy, l nitic; interbedded sand, fine to medium-grained, phosp (finely disseminated grains), inclusions of kaolin	hatic		70	70
Miocene (Undifferentiated):				
Clay: white to light-gray, green to turquoise at depth, s what indurated, sandy, carbonaceous, phosphatic; i bedded limestone, white, dense (much calcitized), sa phosphatic	nter- indy,		20	190
Light-gray to brown phosphatic pebbles prominent at 8	0-90.			
Dolomitic limestone: light-brown, dense, saccharoidal			20	210
No samples			10	220
In Oligocene (Undifferentiated):				
Limestone: light-gray, dense (much calcitized), sacchard cherty			.00	320
Quinqueloculina sp. at 230-240. $Dictyoconus^1$ sp. at 240-250.				
Dolomitic limestone: brown, saccharoidal			30	350
Limestone: as in interval 220-320			25	375
Upper Eocene: Jackson Group: Ocala Limestone:				
Limestone: white to cream, fossiliferous (Foraminifera)			25	400
Operculinoides sp. at 370-380. Gypsina globula at 380-390.				
Summary:		1		
Pliocene to Recent (undifferentiated)			70	70

Pliocene to Recent (undifferentiated)	70	70
Miocene (undifferentiated)	140	<b>2</b> 10
No samples	10	220
In Oligocene (undifferentiated)	155	375
Upper Eocene (Ocala limestone)	25	400

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

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone	180	400

# McINTOSH COUNTY

Location: West side of Blackbeard Island, 3.25 mi. south Well of north end of island, near boat landing Elev. Owner: No. 4 U.S. Biological Survey (U.S. Govt.) Driller: J. R. Neikirk Drilled: March 1935		84
	Thickness (feet)	Depth (feet)
No samples		355
In Miocene (Undifferentiated):		
Sand: fine to coarse-grained, phosphatic; limestone, yellow, very dense, (much calcitized), sandy, fossiliferous (echi- noid and bryozoan remains)	45	400
Oligocene (Undifferentiated):		
Limestone: cream, granular (poorly cemented), fossiliferous (Foraminifera)	105	505
Rotalia beccarii var., Elphidium sp., Discorbis subaraucana, Textularia adalta, Asterigerina sp., Cibicides americanus, Discorbis assulata at 400-424.		
Textularia tumidula, Rotalia byramensis var., Nonion ala- bamensis, Nonionella hantkeni var., Reussella oligocenica 445-455.		
Spiroplectammina mississippiensis var. alabamensis, Reus- sella byramensis, Baggina xenoula, Rotalia mexicana var. at 486-505.		
Limestone: cream to reddish-brown, rather massive (much calcitized), nodular, fossiliferous (bryozoan remains, mega- fossils, and 'Foraminifera)	40	545
Siphonina advena, Dictyoconus <sup>1</sup> sp., Reussella byramensis, Reussella oligocenica, Rotalia mexicana var., Discorbis sp., Quinqueloculina sp., Gypsina globula <sup>1</sup> at 505-565.		

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

	A	283
	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:	(1000)	(1000)
Limestone: light-gray, crystalline (much calcitized), fossil- iferous (abundant bryozoan remains and some Foraminifer		615
Operculinoides sp. at 545-555.		
Operculinoides floridensis at 555-570.		
Asterocyclina nassauensis, Gypsina globula, Argyrotheca sp. at 580-615.	ļ	
Gypsina globula, Asterocyclina nassauensis, Lingulina sp., Baggina xenoula, Eponides jacksonensis, Nonion planatus Argyrotheca sp. at 615-645.		
Limestone: white, densely crystalline (highly calcitized), fos- siliferous (abundant bryozoan remains and Foraminifera)		711
Summary:		
No samples		355
In Miocene (undifferentiated)		400
Oligocene (undifferentiated)	145	545
Upper Eocene (Ocala limestone)	166	711
Potential Water-Bearing Zones:		
Limestone	166	711
McI	NTOSH CO	UNTY
south of Newport River Elev Owner: No. 1 Harris Neck Airport (U.S. Govt.)	No.: GGS .: 16	88
Driller: Stevens Southern Drilled: July 1942		
-	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, angular, arkosic	78	78
Sand: fine-grained, finely disseminated phosphatic grains		200
and clay, dark-gray, carbonaceous, micaceous		
and clay, dark-gray, carbonaceous, micaceous	•	335

	Thickness (feet)	Depth (feet)
Limestone: white, dense (much calcitized), very say coarsely phosphatic; sand, as above	• •	375
No samples		450
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, crystalline (much calcitized), fo iferous (abundant bryozoan remains and some Foran fera); soft limestone, cream, somewhat nodular in text	ni <b>ni-</b>	565
Summary:		
Pliocene to Recent (undifferentiated)	200	200
In Miocene (undifferentiated)		375
No samples		450
In upper Eocene (Ocala limestone)		565
Potential Water-Bearing Zones:		
Sand: medium to coarse-grained	35	370
Limestone		565
I	MeINTOSH CO	UNTY
Location: 5 mi northwest of Darien	Well No. · GGS	596

Location: 5 mi. northwest of Darien	Well No.: GGS 596
Owner: No. 1 Charles Fountain	Elev.: 15
Driller: Woodrow Sapp Drilling Company	
Drilled: 1959	
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine to coarse-grained, subangular to subrounded, some- what phosphatic, micaceous; interbedded clay, brownish- green to greenish-gray, sandy, micaceous	265	265
Miocene (Undifferentiated):		
Clay: dark-olive-green, somewhat blocky, tough, phosphatic at depth, cherty at certain levels	75	340
Sand: fine to medium-grained, subangular to subrounded, phosphatic	50	390
Clay: dark-greenish-gray, sandy, phosphatic	50	440
Limestone: cream to light-brown, rather dense, calcitized, sandy, phosphatic	10	450

Well	LOGS	$0\mathbf{F}$	THE	COASTAL	Plain	OF	GEORGIA
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MACON COUNTY

	Thickness (feet)	Depth (feet)
Sand: fine to medium-grained, subangular, phosphatic; inter- bedded clay and limestone, as above	40	490
Limestone: cream, sandy, phosphatic, fossiliferous (fragments and impressions of megafossils)		510
Sand: fine to coarse-grained, subangular to subrounded	80	590
Oligocene (Undifferentiated):		
Limestone: cream, nodular, somewhat granular, fossiliferous (bryozoan remains and Foraminifera)		630

Rotalia mexicana var. at 590-600.

# Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: white, much calcitized, crystalline, fossiliferous		
(abundant macroshells, bryozoan remains, and some Fora-		
minifera)	150	780
Lepidocyclina sp. at 630-640.		
Operculinoides sp. at 640-650.		
Pseudophragmina flintensis, Asterocyclina sp. at 720-730.		

## Summary:

Pliocene to Recent (undifferentiated)	265	265
Miocene (undifferentiated)	325	590
Oligocene (undifferentiated)	40	630
Upper Eocene (Ocala limestone)	150	780

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	45	120
Sand: fine to medium-grained	50	390
Sand: fine to coarse-grained	80	590
Limestone	150	780

Location: 40' west of Highway 90, north side of Beaver Creek, in Montezuma	Well No.: GGS 60 Elev.: 280
Owner: No. 1 City of Montezuma Driller: Layne-Atlantic Company Drilled: 1938	
	ThicknessDepth(feet)(feet)

Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: medium to coarse-grained, limonitic	65	65
Paleocene: Midway Group: Clayton Formation:		
Sand: as above; and clay, brown, lignitic	20	85

	Thickness (feet)	Depth (feet)
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, limonitic, pyritiferous, lignitic, containing fragments of fossil wood	57	142
Limestone: gray, dense, sandy, crystalline (in texture), fossil- iferous (macroshells); indurated sand at depth	64	206
Inoceramus prisms prominent at 180-206.		
Ripley and Cusseta (Undifferentiated):		
Clay: light- to dark-bluish-gray, micaceous, sandy, pyritifer- ous, fossiliferous (Foraminifera)	62	268
No samples	22	290
Sand: fine to coarse-grained; limestone, gray, dense, sandy; and clay, as above		402
Blufftown Formation:		
Sand: fine to coarse-grained; and clay, brown, fissile, highly micaceous, lignitic	13	415
Sand: fine to coarse-grained; interbedded clay, brown, fissile, splintery, highly micaceous, lignitic	121	536
Summary:		
Lower Eocene (Wilcox group, undifferentiated)		65
Paleocene (Clayton formation)	20	85
Upper Cretaceous (Providence sand)		206
Upper Cretaceous (Ripley and Cusseta, undifferentiated)		402
Upper Cretaceous (Blufftown formation)	134	536
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		142

Sand:	fine t	o coarse-grained	57	142
Sand:	fine t	o coarse-grained	<b>26</b>	206
Sand:	fine t	o coarse-grained	33	445
Sand:	fine $\mathbf{t}$	o coarse-grained	30	536

#### Remarks:

Well contains numerous sample gaps, hence complete resume of potential waterbearing sands cannot be picked.

	MACON COL	INTY
Location: At old Water Works Plant, approximately 200 yards southeast of southeast corner of R.R. Station in Montezuma Owner: No. 2 City of Montezuma Driller: Layne-Atlantic Company	Well No.: GG Elev.: 277	S 145
Drilled: April 1947	Thickness (feet)	Depth (feet)
Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: fine to coarse-grained; interbedded clay, light-g fossiliferous at certain horizons		66
Paleocene: Midway Group: Clayton Formation:		
Clay: chocolate, blocky, lignitic; sand, fine to medium-gra	ined 15	81
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained; interbedded clay (or kac white to gray to dark-gray, micaceous, sandy		190
Ripley and Cusseta (Undifferentiated):		
Clay: gray, micaceous, silty, fossiliferous (Foraminifera)		268
Anomalina pseudopapillosa, Cibicides harperi at 190-26	8.	
Limestone: gray, dense, crystalline (in texture), sandy, siliferous; indurated sand at depth		299
Clay: gray, micaceous, sandy		396
Sand: fine to coarse-grained	49	445
In Blufftown Formation:		
Sand: fine to coarse-grained; interbedded clay, dark-bi fissile, somewhat splintery, highly micaceous, lignitic.		527
Clay: dark-brown, fissile, splintery, highly micaceous, lig sandy; sand, fine to coarse-grained	•	618
Summary:		
Lower Eocene (Wilcox group, undifferentiated)		66
Paleocene (Clayton formation)		81
Upper Cretaceous (Providence sand)		190
Upper Cretaceous (Ripley and Cusseta, undifferentiated)		445

Upper Cretaceous (in Blufftown formation) 173

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	39	120
Sand: fine to coarse-grained		299
Sand: fine to coarse-grained		445
Sand: fine to coarse-grained	20	527

## MACON COUNTY

	Well No.: GG Elev.: 493 (derrick	
Dimeu. August 1991	Thickness (feet)	Depth (feet)
Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: fine to medium-grained, limonitic; clay, mottled, san	ndy 22	22
Sand: fine to coarse-grained; clay (or kaolin), white, mic ceous, somewhat sandy		58
Paleocene: Midway Group: Clayton Formation:		
Clay: gray to tan, hackly; some sand, coarse-grained, limor	nitic 20	78
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, limonitic; clay (or kaolin), gramicaceous, somewhat sandy	• /	97
Clay (or kaolin): white to gray to purple (mottled), mic ceous, somewhat sandy		112
Sand: fine to coarse-grained, limonitic; clay (or kaolin), above		165
Ripley and Cusseta (Undifferentiated):		
Clay: dark-gray, sandy, micaceous, carbonaceous		189
Sand: coarse-grained		203
Clay: dark-gray, sandy, micaceous		263
Sand: fine to coarse-grained		280
Sand: fine to coarse-grained; interbedded clay (or kaolin white to gray to red (mottled), micaceous, somewhat san		416
Sand: fine to coarse-grained		476

Blufftown and Eutaw (Undifferentiated):	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained; interbedded clay, brown, mica- ceous, lignitic	69	545
Tuscaloosa Formation:		,
Sand: fine to coarse-grained, arkosic; interbedded clay (or kaolin), white to gray to red (mottled), micaceous, some- what sandy	101	646

#### Summary:

Lower Eocene (Wilcox group, undifferentiated)	58	58
Paleocene (Clayton formation)	20	78
Upper Cretaceous (Providence sand)	<b>.</b> 87	165
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	311	476
Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	69	545
Upper Cretaceous (Tuscaloosa formation)	101	646

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	10	88
Sand: fine to coarse-grained	22	165
Sand: coarse-grained	14	203
Sand: fine to coarse-grained	17	280
Sand: fine to coarse-grained	86	476
Sand: fine to coarse-grained	42	632

#### MACON COUNTY

Location: Few hundred feet east of City Water Works in Montezuma Owner: No. 3 City of Montezuma Driller: Layne-Atlantic Company		No.: GG : 293	S 408
Drilled: January 1954	,	Thickness (feet)	Depth (feet)
Lower Eocene: Wilcox Group (Undifferentiated):			
Sand: fine to coarse-grained, yellow, argillaceous	<b></b>	. 7	7
Paleocene: Midway Group: Clayton Formation:			
Clay: gray, somewhat indurated, lignitic, finely micaceous	s	. 9	16
Limestone: gray, dense, crystalline (much calcitized), sa fossiliferous (macroshells)	• •	. 18	34

Sand: fine to coarse-grained, angular 14 48

Upper Cretaceous: Providence Sand:	Thickness (feet)	Depth (feet)
Clay: bluish-gray to black, silty, carbonaceous, micaceous, pyritiferous		56
Sand: fine to coarse-grained, angular, arkosic, pyritiferous; interbedded clay, bluish-gray, sandy, micaceous, glauconitic, pyritiferous	137	193
Sand: fine to coarse-grained; limestone, gray, dense, crystal- line, very sandy, fossiliferous (macroshells).	23	216
Ripley Formation:		
Marl: gray, somewhat chalky, sandy, micaceous, glauconitic, pyritiferous, fossiliferous (macroshells and Foraminifera)	60	276
Anomalina pseudopapillosa at 216-243.		
Limestone: gray, dense, very sandy, micaceous, glauconitic, fossiliferous (macroshells); indurated sand at depth		280
Clay: gray, sandy, micaceous, glauconitic, pyritiferous		338
Sand: fine to medium-grained		348
Cusseta Sand:		
Sand: fine to coarse-grained, angular, arkosic; interbedded clay (or kaolin), gray, somewhat sandy, micaceous		403
Blufftown Formation:		
Sand: fine to coarse-grained, arkosic; interbedded clay, dark- brown, fissile, splintery, highly micaceous, lignitic, pyriti- ferous	111	504
Summary:		
Lower Eocene (Wilcox group, undifferentiated)		7
Paleocene (Clayton formation)		48
Upper Cretaceous (Providence sand)		$\begin{array}{c} 216\\ 348 \end{array}$
Upper Cretaceous (Ripley formation) Upper Cretaceous (Cusseta sand)		403
Upper Cretaceous (Blufftown formation)		504
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		92
Sand: fine to coarse-grained		128
Sand: fine to medium-grained		348
Sand: fine to coarse-grained		403
Sand: fine to coarse-grained		450
Sand: fine to coarse-grained	10	470

MACON COUNTY

113					
Location: 8-10 miles north of Montezuma Owner: No. 1 Norris Cattle Company Driller: Layne-Atlantic Company	ell No.: GG	S 422			
Drilled: 1954	Thickness (feet)	Depti (feet)			
Lower Eocene: Wilcox Group (Undifferentiated):					
Clay: brick-red, sandy, limonitic	16	16			
Sand: fine to coarse-grained, angular, somewhat phosphatic		74			
Paleocene: Midway Group: Clayton Formation:					
Clay: black, fissile, carbonaceous, sparsely glauconitic	10	84			
Sand: fine to coarse-grained, angular, limonitic, pyritiferous sideritic	s, 10	94			
Clay: light-gray; limestone, gray, dense, crystalline (muc calcitized), sandy, fossiliferous (macroshells and som Foraminifera); sand, as above	e	115			
Cibicides newmanae, Eponides lotus at 94-105.					
Upper Cretaceous: Providence Sand:					
Clay: black, micaceous, lignitic; sand, fine to coarse-grained arkosic, pyritiferous, sideritic	•	126			
Sand: fine to coarse-grained, angular, arkosic, limonitic; in terbedded clay, dark-gray, silty, micaceous, pyritiferous		177			
Ripley Formation:					
Clay: dark-gray, sandy, micaceous, pyritiferous, sideritic fossiliferous at certain horizons (macroshells); interbedde sand, fine to coarse-grained, limonitic	d	392			
Siderite abundant at 228-249.					
Macroshells present at 249-260.					
Summary:					
Lower Eocene (Wilcox, undifferentiated)		74			
Paleocene (Clayton formation)		115			
Upper Cretaceous (Providence sand) Upper Cretaceous (Ripley formation)		$\frac{177}{392}$			
Potential Water-Bearing Zones:					
Sand: fine to coarse-grained		177			

# MARION COUNTY

	No.: GG : 657	S 329
Owner: No. 1 M. B. Wells, Jr.		
Driller: Southeastern Drilling Company		
Drilled: November 1952		···
No samples	20	20
In Paleocene: Midway Group: Clayton Formation:		
Clay: black, fissile	8	28
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, arkosic, angular	6	34
Kaolin: white to light-gray to pink (mottled), very sandy, micaceous; interbedded sand, fine to medium-grained, angular	46	80
Sand: fine to coarse-grained; clay, as above (latter "cave" from above)	60	140
Ripley Formation:		
Marl: mottled, bluish-gray at depth, micaceous, silty, sider- itic, glauconitic, fossiliferous (Foraminifera)	182	322
Cibicides harperi at 200-220. Gaudryina rudita, Cibicides harperi at 240-260.		
Summary:		

No samples	20	20
In Paleocene (Clayton formation)	8	28
Upper Cretaceous (Providence sand)	112	140
Upper Cretaceous (Ripley formation)	182	322

# Potential Water-Bearing Zones:

# MARION COUNTY

Location: At Water Works, in Buena Vista Owner: No. 2 City of Buena Vista Driller: Layne-Atlantic Company Drilled: August 1948	Well No.: GG Elev.: 633	S 347
Drilled: August 1948	Thickness (feet)	Depth (feet)
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, angular, limonitic		<b>34</b>
Ripley and Cusseta (Undifferentiated):		
Marl: bluish-gray, sandy, micaceous		74
Marl: as above; limestone, gray, dense, crystalline, sandy, fossiliferous (macroshells)		128
Marl: bluish-gray, silty, micaceous, sideritic, fossili (Ostracods and Foraminifera)		195
Cibicides harperi, Anomalina clementiana, Loxostomo tum, Gaudryina rudita at 128-145.	ı plai-	
Sand: fine to coarse-grained, angular, arkosic; inter- clay (or kaolin), gray to red (mottled), micaceous		310
Summary:		
Upper Cretaceous (Providence sand)		34
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	)	310
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	115	310
	MARION CO	UNTY
Location: In Buena Vista Owner: No. 3 City of Buena Vista Driller: Southeastern Drilling Company Drilled: July 1954	Well No.: GG Elev.: 640	S 388
	(feet) Thickness	(feet) Depti

Sand:	fine	to	coarse	e-grain	ed,	angular,	arkosic,	limonitic,		
conta	ains i	nelus	sions (	of kaol	in .				 35	35

	Thickness (feet)	Depth (feet)
Ripley and Cusseta (Undifferentiated):		
Marl: gray to red (mottled), micaceous, sandy		40
Marl: bluish-gray, micaceous, sandy, sideritic, fossilifero (Foraminifera)		88
Sideritic nodules prominent at 50-80.		
Haplophragmoides sp., Gaudryina rudita, Anomalina cle entiana, Loxostoma plaitum at 70-80.	<i>m</i> -	
Limestone: gray, dense, crystalline, very sandy	12	100
Marl: bluish-gray, micaceous, sandy	90	190
Sand: coarse-grained, angular, limonitic		275
Marl: as above		292
Summary:		
Upper Cretaceous (Providence sand)		35
Upper Cretaceous (Ripley and Cusseta, undifferentiated)		292
Potential Water-Bearing Zones:		
Sand: coarse-grained		275
Sand, coarso-gramou		110
]	MARION CO	UNTY
Owner: No. 2 E. N. Murray Driller: Southeastern Drilling Company	Well No.: GG Elev.: 562	S 409
Drilled: December 1954	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: red, very sandy, limonitic		28
Upper Cretaceous: Providence Sand:		
Sand: coarse-grained, arkosic		38
Clay: yellow, very sandy, limonitic		40
Sand: fine to coarse-grained, limonitic	10	50
Sand: fine to medium-grained, angular; interbedded clay kaolin), white, micaceous, sandy		125

WELL	Logs	OF	THE	COASTAL	Plain	OF	GEORGIA	
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	Thickness (feet)	Depth (feet)
Ripley and Cusseta (Undifferentiated):		
Marl: bluish-gray, silty, micaceous, pyritiferous, sideritic, glauconitic, fossiliferous (Foraminifera)	135	260
Anomalina clementiana, Globotruncana sp., Gaudryina ru- dita at 130-140.		
Sand: fine to coarse-grained, angular; interbedded clay, dark-gray to brown, micaceous, pyritiferous, lignitic	120	380
Summary:		
Paleocene (Clayton formation)		28
Upper Cretaceous (Providence sand)		125
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	255	380

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	76	366
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## MARION COUNTY

Location: 2 mi. north of Tazewell, at the "Bryant Place" Wel Owner: No. 1 Tommy Brock Driller: R. G. Duke Drilled: December 1954	1 No.: GG	S 427
Diffied. December 1994	Thickness (feet)	Depth (feet)
No samples	45	45
In Upper Cretaceous: Tuscaloosa Formation:		
Sand: fine to coarse-grained, limonitic, arkosic; interbedded kaolin, white, micaceous	100	145
Sand: coarse-grained, angular	15	160
Sand: fine to medium-grained, arkosic		165
Summary:		
No samples		45
In Upper Cretaceous (Tuscaloosa formation)	120	165
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		160

## MARION COUNTY

	MARION CO	UNTY
Location: 7.5 mi. south of Marion-Talbot County line, east side of Highway 41, north side of dwelling Owner: No. 1 James Rush Driller: Southeastern Drilling Company Drilled: August 1955	Well No.: GG Elev.: 680	S 443
	Thickness (feet)	Depth (feet)
No samples		10
In Upper Cretaceous: Blufftown and Eutaw (Undifferentia	ated:	
Sand: fine to coarse-grained, angular, arkosic, limonitic terbedded clay, gray to yellow to brown to red (mott micaceous, sandy	led),	254
Summary:		
No samples		10
In Upper Cretaceous (Blufftown and Eutaw, undifferentia	ted) 244	254
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		176
Sand: fine to coarse-grained		234
Sand: fine to coarse-grained		246
Sand: fine to coarse-grained		254
Remarks:		
Additional aquifers occur at still lower levels, i.e. in the Tuscaloosa formation.	e more deeply	buried
	MARION CO	UNTY
Location: Approximately 4 mi. southeast of Buena Vista, about ½ mi. west of Highway 26, Land Lot 207, Land District 31	Well No.: GG Elev.: 600 <sup>1</sup>	S 476

District 31

Owner: No. 1 Senator Burgin

Operator: Lee Oil and Gas Company

Drilled: February 1956

Thickness Depth (feet) (feet)

# Paleocene: Midway Group: Clayton Formation:

Clay: brick-red, very sandy, limonitic; inclusions of kaolin,		
white, sandy, micaceous	10	10
No samples	10	20

<sup>1</sup>Approximate elevation above sea level.

Well Logs of the Coastal Plain of Georgia	L	297
	Thickness (feet)	Depth (feet)
In Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, subangular, micaceous, limon- itic; interbedded clay, light-gray to red (somewhat mottled), sandy, micaceous	80	100
Sand: coarse-grained, subangular, arkosic, limonitic; inter- bedded clay, dark-bluish-gray, sandy, micaceous, pyritifer- ous; indurated sand, fine to medium-grained, rather dense, crystalline, pyritiferous, micaceous, fossiliferous (mega- fossils)	80	180
In Ripley and Cusseta (Undifferentiated):		
Sand: fine to medium-grained, subangular; interbedded clay, red to dark-bluish-gray, sandy, micaceous, pyritiferous, fossiliferous at certain levels (macroshells)		430
Sand: coarse-grained, subangular; interbedded clay, white to red (mottled), sandy, micaceous	50	480
In Blufftown and Eutaw (Undifferentiated):		
Sand: fine to medium-grained, subangular; interbedded clay, dark-brown, somewhat laminated, silty, very micaceous, lignitic, pyritiferous	30	510
Clay: dark-brown, laminated, silty, very micaceous, lignitic, pyritiferous, fossiliferous (macroshells, Ostracods and Foraminifera at depth); interbedded sand, fine to medium- grained, subangular, micaceous, pyritiferous, lignitic	410	<b>92</b> 0
Sand: medium-grained, coarser-grained with increased depth, subangular, phosphatic, somewhat arkosic, micaceous, py- ritiferous	40	960
In Upper Tuscaloosa Formation:		
Sand: coarse-grained, subangular, arkosic, lignitic, contain- ing scattered grains of "rose quartz"	110	1,070
Sand: as above but somewhat finer-grained; interbedded kao- lin, light-gray to red (mottled), sandy, micaceous		1,150
In Middle Tuscaloosa Formation:		
Clay: dark-gray to pale-yellowish-green, somewhat iron stained, laminated, sandy, micaceous, carbonaceous; inter- bedded sand, coarse-grained, subangular, arkosic	160	1,310

In Lower Tuscaloosa Formation:	Thickness (feet)	Depth (feet)
Sand: coarse-grained, subangular grains of "rose quartz" interbedded clay, yellowish-green to brick red to purpl (mottled), very micaceous, greasy appearing, sandy	e	1,530
Sand: as above but finer-grained; interbedded clay, as above		1,590
Basement Complex (Undifferentiated):		
Crystalline rock: dark-gray to black, dense, crystalline, biotit gneiss(?)		1,770
0		
Summary:		
Paleocene (Clayton formation)		10
No samples		20 180
In Upper Cretaceous (Providence sand)		480
In Upper Cretaceous (Ripley and Cusseta, undifferentiated) In Upper Cretaceous (Blufftown and Eutaw, undifferentiated		480 960
In Upper Cretaceous (Tuscaloosa formation)	•	1,590
Basement complex (undifferentiated)		1,770
basement complex (unufferentiated)	100	1,110
Remarks:		
<b>Remarks:</b> 1. Interval 430-480 probably representative of Cusseta sand. 2. Interval 920-960 possible Eutaw formation restricted.		
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> </ol>	ILLER COU	UNTY
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> </ol>	ILLER COU Vell No.: GG lev.: 169	
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>W</li> <li>Owner: No. 2 City of Colquitt</li> </ol>	ell No.: GG	
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> </ol>	Vell No.: GG lev.: 169 Thickness	S 112 Depth
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> </ol>	Vell No.: GG lev.: 169 Thickness (feet)	S 112 Depth (feet)
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> </ol> No samples	Vell No.: GG lev.: 169 Thickness (feet) 450	S 112 Depth (feet)
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> <li>No samples</li> <li>In Lower Eocene: Wilcox Group (Undifferentiated):</li> <li>Limestone: white, sandy, coarsely glauconitic, fossiliferou</li> </ol>	Vell No.: GG lev.: 169 Thickness (feet) 450	S 112 Depth (feet) 450
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> <li>No samples</li> <li>In Lower Eocene: Wilcox Group (Undifferentiated):</li> <li>Limestone: white, sandy, coarsely glauconitic, fossiliferou (Foraminifera)</li> </ol>	Vell No.: GG lev.: 169 Thickness (feet) 450 s 	S 112 Depth (feet) 450
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt W</li> <li>Owner: No. 2 City of Colquitt E</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> <li>No samples</li> <li>In Lower Eocene: Wilcox Group (Undifferentiated):</li> <li>Limestone: white, sandy, coarsely glauconitic, fossiliferou (Foraminifera)</li> <li>Asterocyclina sp. at 510-520.</li> <li>Sand: fine to medium-grained, glauconitic, fossiliferou</li> </ol>	Vell No.: GG lev.: 169 Thickness (feet) 450 s 	S 112 Depth (feet) 450 520
<ol> <li>Interval 430-480 probably representative of Cusseta sand.</li> <li>Interval 920-960 possible Eutaw formation restricted.</li> <li>M</li> <li>Location: Below elevated steel reservoir in Colquitt</li> <li>Wowner: No. 2 City of Colquitt</li> <li>Driller: W. B. Graham</li> <li>Drilled: June 1946</li> <li>No samples</li> <li>In Lower Eocene: Wilcox Group (Undifferentiated):</li> <li>Limestone: white, sandy, coarsely glauconitic, fossiliferou (Foraminifera)</li> <li>Asterocyclina sp. at 510-520.</li> <li>Sand: fine to medium-grained, glauconitic, fossiliferou (Foraminifera)</li> </ol>	<pre>/ell No.: GG lev.: 169</pre>	S 112 Depth (feet) 450 520

No samples

940

230

	Thickness (feet)	Depth (feet)
In Paleocene: Midway Group: Clayton Formation:		
Limestone: gray, crystalline, fossiliferous (Foraminifera)	100	1,040
Anomalina midwayensis at 940-950.		
Operculinoides sp. at 1010-1020.		

#### Summary:

No samples	450	450
In lower Eocene (Wilcox group, undifferentiated)	260	710
No samples	230	940
In Paleocene (Clayton formation)	100	1,040

# **Potential Water-Bearing Zones:**

Limestone	100	1,040
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## MITCHELL COUNTY

	r Well No.: GGS 100 Elev.: 350 <sup>1</sup>	
	Thickness (feet)	Depth (feet)
No samples	315	315
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white to cream, dense, much calcitized, crystalline, fossiliferous at certain levels (Foraminifera)	60	375
Camerina striatoreticulata at 315-330.		
No samples		390
Limestone: as above; interbedded dolomitic limestone, dark- brown, saccharoidal	110	500
Summary:		
No samples	315	315
In upper Eocene (Ocala limestone)	185	500
Potential Water-Bearing Zones:		
Limestone	185	500

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

#### MITCHELL COUNTY

(feet)

(feet)

Location: About 5.5 mi. east of Pelham, Land Lot 133,	Well No.: GGS 109
10th Land District	Elev.: 338
Owner: No. 1 J. H. Pullen	(derrick floor)
Driller: Stanolind Oil and Gas Company	
Drilled: August 1944	
	Thickness Depth

## Miocene (Undifferentiated):

Sand: fine to coarse-grained, angular, limonitic, somewhat arkosic; interbedded clay, mottled to light-gray, sandy	70	70
Clay: pale-green, sandy; some sand as above	60	130
Clay and sand: as above; interbedded limestone, white, sandy	100	230
Limestone: white, sandy; interbedded clay and sand	110	340
Sand: fine to coarse-grained; some clay and limestone	20	360
Sand, clay, and limestone: as above; some dolomitic limestone, brown, saccharoidal	10	370

#### Oligocene (Undifferentiated):

Limestone, clay, and sand: as above; more nodular limestone		
with depth, cream, rather massive, fossiliferous in certain		
zones (macroshells, Ostracods, and Foraminifera)	25	395
Rotalia byramensis var., at 370-380.		

## Upper Eocene: Jackson Group: Ocala Limestone:

Dolomitic limestone: dark-brown, saccharoidal; interbedded limestone, cream, much calcitized, fossiliferous (macroshells and Foraminifera)	315	710
Gypsina globula at 420-430. Asterocyclina nassauensis, Camerina striatoreticulata at 450-460.		
Dolomitic limestone: as above	80	790

#### Middle Eocene: Claiborne Group: Lisbon Formation:

Limestone: light-gray, sandy, coarsely glauconitic, fossilifer- ous (macroshells, Ostracods, and Foraminifera); inter- bedded marl, light-gray, finely glauconitic, fossiliferous (Ostracods and Foraminifera); indurated sand, fine to me- dium grained, light-gray, finely glauconitic	145	935
Lepidocyclina (Polylepidina) antillea at 760-770.		
Siphonina claibornensis, Cibicides westi at 860-870.		

Well Logs of the Coastal Plain of Georgia	L .	301
	Thickness (feet)	Depth (feet)
Tallahatta Formation:		
Limestone: light-gray, sandy, somewhat argillaceous, finely glauconitic, fossiliferous (Foraminifera)	215	1,150
Valvulineria jacksonensis var. persimilis, Valvulineria dan- villensis var. gyroidinoides, Cibicides westi, Cibicides talla- hattensis at 1045-1060.		
Dolomitic limestone: dark brown, saccharoidal, coarsely glau- conitic	45	1,195
In Lower Eocene(?): Wilcox Group (Undifferentiated):		
Indurated sand: fine to medium-grained, coarsely glauconitic, fossiliferous (a coquina)	30	1,225
No samples	30	1,255
Marl: light-gray, somewhat fissile, silty, carbonaceous, mica- ceous, glauconitic, fossiliferous (some Foraminifera)	10	1,265
Robulus sp., Eponides dorfi, Alabamina wilcoxensis, Mar- ginulina sp. at 1255-1265.		
Sand: fine to coarse-grained, micaceous, abundantly glaucon- itic; interbedded marl, as above	60	1,325
Paleocene: Midway Group: Clayton Formation:		
Limestone: white, dense; interbedded sand, fine-grained, limey (somewhat indurated), finely glauconitic, micaceous, fossil- iferous (macroshells and some Foraminifera); clay, light- gray, fissile, glauconitic, fossiliferous (Foraminifera)	100	1,425
Pseudophragmina stephensoni, Operculinoides catenula at 1335-1350.		
Anomalina acuta at 1395-1410.		
Limestone: light-gray, dense, coarsely glauconitic, sandy, fos- siliferous (macroshells, bryozoan remains and Foramini- fera); interbedded thin beds of clay, light-gray, fissile glauconitic		1,575
Vaginulina midwayana at 1545-1560.	•	
Limestone: cream, granular, loosely cemented, cherty	110	1,685
Marl: dark-gray, sandy, glauconitic, fossiliferous (abundant Foraminifera)		1,740

	Thickness (feet)	Depth (feet)
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Marl: bluish-gray to brown, somewhat sandy, chalky, glau- conitic, micaceous, pyritiferous, fossiliferous (macroshells, Ostracods and Foraminifera)	1,155	2,895
Bolivinoides decorata, Globotruncana cretacea at 1890-1905. Kyphopyxa christneri at 2370-2385. Vaginulina texana at 2625-2640.		
Sand: fine to medium-grained, more or less indurated, phos- phatic, micaceous, glauconitic, fossiliferous (macroshells); interbedded clay or shale, dark-gray to pale-green, fissile, silty, finely micaceous, glauconitic	210	3,105
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, pale-green, sandy, iron-stained	295	3,400
"Shale": dark-gray to black, fissile, finely micaceous, carbon- aceous, fossiliferous (macroshells at certain levels)	100	3,500
Sand: fine to coarse-grained, glauconitic; interbedded shale, as above	100	3,600
Sand: fine to coarse-grained, angular, massive, arkosic; in- terbedded clay, green to purple (mottled), sandy, micaceous	650	4,250
In Lower Cretaceous(?) (Undifferentiated):		
Clay: dark-green to purple to red, blocky, micaceous, sideritic, greasy appearance; brick-red, sandy, highly micaceous at depth	38	4 <b>,</b> 2881
Summary:		
Miocene (undifferentiated)		370
Oligocene (undifferentiated)		395
Upper Eocene (Ocala limestone)		710
Middle Eccene (Lisbon formation)	145	635
	0.00	4 405

Middle Eocene (Tallahatta formation)	260	1,195
In lower Eocene(?) (Wilcox group, undifferentiated)	130	1,325
Paleocene (Clayton formation)	415	1,740
Upper Cretaceous (post-Tuscaloosa, undifferentiated)1,	365	$3,\!105$
Upper Cretaceous (Tuscaloosa formation)	145	4,250
In Lower Cretaceous(?) (undifferentiated)	38	4,288

<sup>&</sup>lt;sup>1</sup>Not reported below 4288. Total depth 7490.

Potential Water-Bearing Zones:

Limestone	170 60 100	500 1,150 1,325 1,425 1,575
:	MITCHELL C	OUNTY
	Well No.: GGS Elev.: 182	218
Residuum:		
Clay: mottled, sandy, limonitic	20	20
Sand: fine to coarse-grained, angular		30
Clay: mottled, sandy, limonitic		90
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, porous, fossiliferous (abundant bry remains and Foraminifera)		250
Operculinoides sp. common at 90-100.		

Camerina striatoreticulata at 130-140. Amphistegina pinarensis var. at 240-250.

#### Summary:

Residuum		90
Upper Eocene (Ocala limestone)		310

## **Potential Water-Bearing Zones:**

Limestone .		160	250
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303

Depth (feet)

Thickness (feet)

#### MITCHELL COUNTY

Location: 1.7 mi. northeast of Cotton, 0.1 mi. north of Highway 93	Well No.: GGS 400 Elev.: 340 <sup>1</sup>
Owner: No. 1 Cotton Consolidated Elementary School Drilled: October 1954	
	Thickness Depth (feet) (feet)

#### Miocene (Undifferentiated):

Clay: bluish-gray to purple (mottled), sandy, limonitic	23	23
Clay: tan to olive-green, sandy, limonitic	41	64
Clay: yellowish-green, sandy, phosphatic (finely disseminated)	51	115
Dolomitic limestone: light-brown, rather dense	13	128
Clay: dark-green, sandy; interbedded limestone, white, dense, sandy	80	208
Limestone: white, dense, sandy, dolomitized and brown at depth	108	316

#### Summary:

Miocene	(undifferentiated)	 316	316

#### **Potential Water-Bearing Zones:**

Limestone		108	316
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#### **Remarks**:

Better aquifers occur below total depth (316) of above well.

#### MITCHELL COUNTY

Location: 10.5 mi. southwest of Camilla via Highway 97 Well No.: GGS 417 to junction with county road, then 0.12 mi. west via county road to site which is 0.1 mi. north of county road Owner: No. 1 Oak Grove Elementary School Driller: Layne-Atlantic Company Drilled: March 1955 Depth Thickness

#### (feet) (feet)

#### **Residuum**:

Clay: mottled, sandy, limonitic, fragments of residual lime-		
stone at depth	38	38
<sup>1</sup> Average elevation based on Georgia State Highway Maps.		

	Thickness (feet)	Depth (feet)
Clay: dark-brown, sandy, limonitic; residual limestone, as abov	e 20	58
No samples		63
In Upper Eocene: Jackson Group: Ocala Limestone: Limestone: somewhat leached but soft, porous, fossiliferous (some Foraminifera)	21	84

Camerina cf. C. striatoreticulata at 63-84.

.

#### Summary:

Residuum	58	58
No samples	5	63
In upper Eocene (Ocala limestone)	21	84
Potential Water-Bearing Zones:		

## MITCHELL COUNTY

Location: In Camilla Owner: No. 4 City of Camilla	Well No.: GGS 564 Elev.: 180 <sup>1</sup>		
Driller: Layne-Atlantic Company	Т	hickness (feet)	Depth (feet)
Residuum:			
Clay: light-gray to tan to pink (mottled), very sandy, li	monitie	25	25
Clay: dark-brown to olive-green, lignitic, sandy, limonit	ic	21	46
Limonitic bed: dark-brown, dense		4	50
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: yellow to tan at depth, calcitized, more cal- and crystalline with depth, fossiliferous (macroshells noid and bryozoan remains, Ostracods, and Foraminife	, echi-	291	341
Operculina mariannensis at 50-61.			
Heterostegina ocalana, Gypsina globula, Lepidocycli at 101-115.	na sp.		
Camerina striatoreticulata at 115-135.			
Amphistegina pinarensis var. at 255-263.			
Lepidocyclina sp. common at 330-337.			

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

	Thickness (feet)	Depth (feet)
Middle Eocene(?): Claiborne Group (Undifferentiated):		
Sandstone: tan, fine-grained, angular, coarsely glauconitic	?	341
~		
Summary:		
Residuum		50
Upper Eocene (Ocala limestone)	291	341
Middle Eocene(?) (Claiborne group, undifferentiated)	?	341
Potential Water-Bearing Zones:		
Limestone	291	341

Location: 0.2 mi. southeast of Jenkins Quarry Owner: Test Hole Driller: Marquette Cement Company	Well No.: GGS 620 Elev.: 270			320
		Thickness (feet)	Depth <sup>1</sup> (feet)	

MITCHELL COUNTY

# In Oligocene (Undifferentiated):

Limestone: white, somewhat saccharoidal, fossiliferous (Fora- minifera); some clay, pale brownish-gray, blocky, tough Asterigerina subacuta, Siphonina advena, Lepidocyclina sp. at 16.	16
Limestone: as above, but more calcitized, sparingly fossilifer- ous (rare Foraminifera)	30
Limestone: white, much calcitized, somewhat nodular, granu- lar, porous	60
Limestone: cream, somewhat saccharoidal, nodular, calcitized	78
Limestone: as above, but fossiliferous (Foraminifera) Rotalia mexicana var. at 93.	93
Limestone: as above	113
Limestone: as above	125
In Upper Eocene: Jackson Group: Ocala Limestone:	
Limestone: flat-white, much calcitized, somewhat saccharoidal, fossiliferous (abundant bryozoan remains and some Fora- minifera)	132

Eponides jacksonensis, Operculina mariannensis at 132.

<sup>1</sup>Depth below land surface of spot samples.

Well Logs of the Coastal Plain of Georgia		307
WILL LOOP OF THE CONSTANT FRAME OF CEORGIA		
	Thickness (feet)	Depth (feet)
Limestone: as above		151
Limestone: flat-white, more calcitized than above, granular, saccharoidal, fossiliferous (bryozoan remains)		171
Summary:		
In Oligocene (undifferentiated)		125
In upper Eocene (Ocala limestone)	39 <sup>2</sup>	171
Potential Water-Bearing Zones:		
Limestone	155	171
MONTGO	MERY CO	UNTY
Location: 10.35 mi. northwest of Uvalda (map dis- tance), and 0.5 mi. south of McAllister Creek Elev.: 133 Owner: No. 1 Hugh Peterson Driller: Dixie Well Drilling Company Drilled: September 1052		
Drilled: September 1952	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Sand: fine to medium-grained, angular, arkosic; interbedded clay, light-gray, sandy, limonitic	50	50
Clay: dark-green, sandy; interbedded sand, as above		100
Clay: dark-green, sandy, sandier with depth; interbedded limestone, white, somewhat calcitized and crystalline, sandy, fossiliferous (macroshells at depth); beds of sand, fine to coarse-grained, angular grains, phosphatic (at depth)		220
Macroshells at 140-150.		
Black phosphatic pebbles common at 160-170.		
Macroshells abundant at 200-220.		
Oligocene (Undifferentiated):		
Limestone: white to light-gray, nodular, fossiliferous (bryo- zoan remains and some Foraminifera)	20	240
Elphidium sp. at 220-230. Pyrgo sp. at 230-240.		

<sup>\*</sup>Estimated from spot samples.

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Summary :		Thickness (feet)	Depth (feet)
Miocene (undifferentiated)			220
Oligocene (undifferentiated)			$\frac{220}{240}$
Potential Water-Bearing Zor	les:		
Sand: fine to coarse-grained		10	180
Limestone			240
	MONTGO	MERY CO	UNTY
Location: Near Mt. Vernon Owner: No. 1 Mt. Vernon Elementary and High School	Well No.: Elev.: 228		
Driller: M. M. Gray Drilling Company Drilled: 1955			
		Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):			
Clay: mottled, sandy, limonitic; interbedded san coarse-grained, angular, arkosic	•	60	60
Clay: yellowish-green, sandy, fossiliferous at dep bedded sand, fine to coarse-grained, angular, ark phatic at depth	osic, phos-	270	330
Black phosphatic pebbles common at 200-210.			
Macroshells at 290-300.			
Oligocene (Undifferentiated):			
Limestone: light-gray, extremely dense, massiv sandy, sparsely phosphatic (at top), fossilifer echinoid and bryozoan remains and Foraminif abundant at depth)	ous (some era, latter	120	450
Rotalia mexicana var., Quinqueloculina sp. at 340	-350.		
$Gypsina \ globula^1$ at 360-370.			
Lepidocyclina <sup>1</sup> sp., Coskinolina? <sup>1</sup> sp. at 400-410.			
Dictyoconus <sup>1</sup> sp. at 440-450.			
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: cream, relatively soft, somewhat calc granular, nodular at certain levels, fossiliferous and bryozoan remains and Foraminifera)	(echinoid	50	500
Lepidocyclina <sup>2</sup> sp. at 450-460.			
Lepidocyclina sp. common at 480-490.			

<sup>&</sup>lt;sup>1</sup>Reworked(?) fossil of middle Eocene age. <sup>2</sup>Probably Lepid. chaperi.

	Thickness (feet)	Depth (feet)
Summary:		
Miocene (undifferentiated)	. 330	330
Oligocene (undifferentiated)	. 120	450
Upper Eocene (Ocala limestone)		500
Potential Water-Bearing Zones:		
Limestone	160	500

#### MONTGOMERY COUNTY

Location: Near Uvalda	Well No.: GGS 514	
Owner: No. 1 Uvalda Elementary School	Elev.: 185	
Driller: Scott Brothers		
Drilled: 1955		
	Thickness (feet)	Depth (feet)

# Miocene (Undifferentiated):

Sand: fine to coarse-grained, limonitic; some clay, pale-green		
to red (mottled), sandy	10	10
Clay: pale-green, sandy	50	60
Sand: fine to medium-grained, coarser and arkosic at depth; some clay, as above	20	80
Clay: pale-green, micaceous, cherty and phosphatic at depth	120	200
Light-brown chert common at 90-100.		
Fine-grained phosphatic pebbles at 100-110.		
Sand: fine-grained, finely phosphatic; some clay, as above	10	210
Clay: dark-green, sandy	20	230
Sand: fine to coarse-grained, arkosic	10	240
Clay: dark-green, sandier and abundantly phosphatic at depth	40	280
Clay: as above; fragments of limestone, white, weathered, macroshells	10	290
Limestone: white, sandy, phosphatic, fossiliferous	20	310
Limestone: as above; clay, pale-green, blocky, with conchoidal fracture	80	390

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, subangular, more ind depth, phosphatic, fossiliferous (a coquina at certa		430
Oligocene (Undifferentiated):		
Limestone: light-gray, somewhat reddish-brown to depth, nodular, very sandy, sparsely phosphatic, ous (echinoid and bryozoan remains, Ostracods, a minifera at certain levels)	fossilifer- and Fora-	520
Rotalia mexicana var. at 440-450.		
Quinqueloculina sp., Elphidium sp., Rotalia mexi at 450-460.	cana var.	
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: reddish-brown to cream, rather soft ar somewhat granular at depth, fossiliferous (commo dant echinoid and bryozoan remains and Foramini Camerina striatoreticulata, Lepidocyclina sp. a Camerina striatoreticulata abundant at 530-547.	n to abun- fera) 27	547
Summary:		
•		
Miocene (undifferentiated)		430
Oligocene (undifferentiated)		520
Upper Eocene (Ocala limestone)		547
Potential Water-Bearing Zon	es:	
Limestone		547
· · ·		
	MONTGOMERY CO	)UNTŸ
Location: Near Ailey	Well No.: GGS 515	
Owner: No. 1 Ailey Elementary and High School	Elev.: 253 <sup>1</sup>	

e mer rier i meg mementary	and mg.	i Seneor		
Driller: Scott Brothers				
Drilled: 1955				
			ickness feet)	Depth (feet)

# Miocene (Undifferentiated):

Clay: pale-green to mottled, sandy; interbedded sand, fine to		
medium-grained, subangular, phosphatic	315	315

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

Well	LOGS	$\mathbf{0F}$	THE	COASTAL	Plain	OF	GEORGIA	
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	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: light-gray, nodular, extremely dense and crystal- line, very sandy, somewhat cherty, sparsely phosphatic, fos- siliferous (some echinoid and bryozoan remains, and Fora- minifera)	65	380
Rotalia mexicana var., Asterigerina sp. at 315-320. Gypsina globula², Quinqueloculina sp., Rotalia mexicana var., Asterigerina sp. at 320-330.		
Limestone: as above, but reddish-brown	20	400
Upper Eocene: Jackson Group: Ocala Limstone:		
Limestone: cream, rather soft and chalky, somewhat granular at depth, fossiliferous (echinoid and bryozoan remains and Foraminifera)	112	512
Lepidocyclina sp. common at 400-410.		
Gypsina globula common at 410-420.		
$Lepidocyclina^3$ sp. common to abundant at 450-460.		
Summary:		
Miocene (undifferentiated)	315	315
Oligocene (undifferentiated)		400
Upper Eocene (Ocala limestone)	112	512
Potential Water-Bearing Zones:		
Limestone	132	512
MONTGO	MERY CO	UNTY
Location: Approximately 6 mi. south of Soperton Well No.: on U.S. Highway 221 (State Highway 56) Owner: No. 1 C. H. Goff Driller: M. M. Gray Well Drilling Company	GGS 600	
Drilled: 1959	<b>7</b> 71 1 1	<b>D</b> (1
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: pale-yellowish-green with red to purple streaks (mottled), very sandy, limonitic		50
Sand: fine to medium-grained, subangular, arkosic		105
·		100
<sup>2</sup> Reworked(?) fossil of middle Eocene age. <sup>3</sup> Probably Lepid. chaperi.		

<sup>4</sup>Reworked(?) fossil of mi <sup>9</sup>Probably Lepid. chaperi.

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	Thickness (feet)	Depth (feet)
Sand: as above but coarser-grained		150
Clay: dark-brownish to olive-green, very sandy	125	275
Sand: fine-grained, subangular		280
Sand: coarse-grained, subangular, arkosic	3	283
Oligocene (Undifferentiated):		
Limestone: light-gray, much calcitized, saccharoidal, fossil- iferous (molds and impressions of megafossils and some Foraminifera)	3	286
Quinqueloculina sp. at 280-286.		
Pyrgo sp., Robulus arcuato-striatus var., Reussella sp., Rotalia mexicana var., Gypsina globula <sup>1</sup> , Lepidocyclina <sup>1</sup> sp. at 286-295.		
Limestone: cream, rather massive, much calcitized, saccha- roidal, fossiliferous (some Gastropods, echinoid and bryo- zoan remains and some Foraminifera)	119	405
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray to white, much calcitized, crystalline, fossiliferous (some macroshells, echinoid remains, bryozoan remains and some Foraminifera)	150	555
Bryozoan remains common at 415-425.		
Lepidocyclina sp. at 425-435.		
Operculinoides sp. at 445-455.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: as above but sandy	70	625
Siphonina claibornensis, Cibicides pseudoungerianus var. lisbonensis, Cibicides westi at 565-585.		
Limestone: light-gray, massive, much calcitized, crystalline, dense, sparsely glauconitic, sparingly fossiliferous at cer- tain levels (some macroshells, echinoid and bryozoan re- mains and Foraminifera)	20	645
Summary:		
Miocene (undifferentiated)	283	283
Oligocene (undifferentiated)		405
In upper Eocene (Ocala limestone)		555
Middle Eocene (Lisbon formation)	90	645
Potential Water-Bearing Zones:		
Limestone	269	555

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

#### **MUSCOGEE COUNTY**

Location: 0.5 mi. north of main entrance to Fort Benning Military Reservation, 0.2 mi. northwest of junction of Highways 1 and 85, west side of Highway 85 Owner: No. 1 W. M. McRae Driller: L. M. Gray Drilling Company Drilled: September 1951 Thickness Depth (feet)

#### Pliocene to Recent (Undifferentiated):

Sand: coarse-grained (up to gravel size); interbedded clay, brown, sandy	54	54
In Upper Cretaceous: Tuscaloosa Formation:		
Kaolin: gray, micaceous, sandy	5	59
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, gray to red (mottled), micaceous, sandy	200	259
Clay: pale-green to red (mottled), sandy, micaceous; inter- bedded sand, fine to coarse-grained, angular, arkosic	117	376
Clay: brick-red, sandy, highly micaceous	63	439
In Basement Complex (Undifferentiated):		
Crystalline rock: much altered through weathering	6	445
Summary:		
Pliocene to Recent (undifferentiated)	54	54
In Upper Cretaceous (Tuscaloosa formation)	385	439
In basement complex (undifferentiated)	6	445

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	20	149
Sand: fine to coarse-grained	40	239

#### **Remarks:**

Driller reported "hard rock" (probably unaltered basement complex) at 445.

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

# PEACH COUNTY

	I LACH COU	
Location: Few miles southwest of Fort Valley, at Fort Valley State College Owner: No. 1 Fort Valley State College Driller: Layne-Atlantic Company Drilled: March 1953	Well No.: GG Elev.: 517	S 348
	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: gray to red (mottled), sandy		38
Upper Cretaceous: Providence Sand:		
Sand: coarse-grained, limonitic; clay (or kaolin), dark-br to yellow to purple (mottled), sandy, micaceous		45
Kaolin: cream, micaceous, sandy		65
Sand: coarse-grained, angular; some kaolin, light-gray, m ceous		85
Kaolin: light-gray, micaceous		105
Sand: fine to coarse-grained; some kaolin, white to (mottled), micaceous		125
Sand: coarse-grained, angular, limonitic		148
Ripley and Cusseta (Undifferentiated):		
Clay: light-gray to yellow, micaceous, sandy		154
Sand: fine to medium-grained; some clay, as above		170
Sand: fine to medium-grained; interbedded kaolin, whit gray to red (mottled), micaceous, sandy		215
Blufftown and Eutaw (Undifferentiated):		
Sand: fine to coarse-grained, angular, limonitic; interbed clay (or kaolin), gray to black, micaceous, lignitic		325
Black, lignitic clay prominent at 225-245.		
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, limonitic, rather sive; interbedded clay (or kaolin), gray to red (mottl micaceous, sandy	led),	495

Summary:	Thickness (feet)	Depth (feet)
Paleocene (Clayton formation)	38	38
Upper Cretaceous (Providence sand)	110	148
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	67	215
Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	. 110	325

# Potential Water-Bearing Zones:

Upper Cretaceous (Tuscaloosa formation) 170

Sand: fine to coarse-grained	35	<b>140</b>
Sand: fine to medium-grained	30	205
Sand: fine to coarse-grained	75	300
Sand: fine to coarse-grained	55	415
Sand: fine to coarse-grained	30	455
Sand: fine to coarse-grained	15	487

#### PEACH COUNTY

Location: In Fort Valley	Well No.: GGS 369
Owner: No. 4 City of Fort Valley	Elev.: 525 <sup>1</sup>
Driller: Layne-Atlantic Company	
Drilled: January 1954	
	Thislances Donth

	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: brick-red, very sandy, limonitic, and scattered frag- ments of residual limestone	24	24
Sand: fine to coarse-grained, angular	8	32
No samples	3	35
In Upper Cretaceous: Providence Sand:		
Kaolin: white, micaceous, sandy	13	48
Sand: fine to coarse-grained		120
In Ripley and Cusseta (Undifferentiated):		
Clay: gray to red (mottled), micaceous, sandy	90	210
In Blufftown and Eutaw (Undifferentiated):		
Sand: fine to coarse-grained; clay, gray, very micaceous		234
Clay: gray, silty, very micaceous	16	250
Sand: fine to coarse-grained; some clay, as above		280
<sup>1</sup> Average elevation based on Georgia State Highway Maps.		

315

Tuscaloosa Formation:	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, arkosic; some clay (or kaolin), gray to pink (mottled), micaceous, sandy		315
No samples	11	326
Sand: coarse-grained, arkosic	34	360
No samples	36	396
Sand: fine to coarse-grained	109	505
Clay: gray to brick-red, very micaceous, sandy		517

### Summary:

Paleocene (Clayton formation)	32	32
No samples	3	35
In Upper Cretaceous (Providence sand)	85	120
In Upper Cretaceous (Ripley and Cusseta, undifferentiated)	90	<b>210</b>
In Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	70	280
Upper Cretaceous (Tuscaloosa formation)	237	517

### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	<b>25</b>	145
Sand: fine to coarse-grained	30	190
Sand: fine to coarse-grained	<b>20</b>	230
Sand: fine to coarse-grained	40	320
Sand: fine to coarse-grained	40	410
Sand: fine to coarse-grained	25	480

#### **Remarks:**

Overall quality of samples poor. Potential water-bearing zones selected from electric log of well.

	PEACH COU	NTY
Location: 1.0 mi. northeast of Central of Georgia R.R. Station, in Fort Valley Owner: No. 1 Atlantic Ice Company Driller: Layne-Atlantic Company Drilled: April 1955	Well No.: GG Elev.: 525 <sup>1</sup>	S 426
	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: brick-red, sandy, limonitic		20

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

WELL	Logs	OF	THE	COASTAL	Plain	$\mathbf{OF}$	GEORGIA	
AA DUU	1000	Or	11111	OUASIAD	1 DAIN	or	GEORGIA	

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Upper Cretaceous: Providence Sand:	Thickness (feet)	Depth (fe <b>e</b> t)
Kaolin: white to red (mottled), sandy	. 10	30
Sand: fine to coarse-grained; some clay, as above	_ 25	55
Kaolin: white to red (mottled), very sandy	. 7	62
Sand: fine to medium-grained, angular, limonitic, arkosic	. 13	75
Clay: mottled, very sandy	. 17	92
Ripley and Cusseta (Undifferentiated):		
Clay: light tan, sandy	. 16	108
Sand: fine to coarse-grained, angular; some clay, as above		147
Sand: fine to coarse-grained, angular, limonitic, arkosic	33	180
Blufftown and Eutaw (Undifferentiated):		
Clay: dark-gray to black, sandy, very micaceous	. 5	185
Sand: fine to coarse-grained, angular, arkosic		210
Clay: light-gray to red (mottled), very sandy		217
Sand: fine to coarse-grained, angular, arkosic	18	235
In Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic; some clay, red, micaceous	68	303
Sand: fine to coarse-grained, angular, arkosic; interbedded clay (or kaolin), white to red (mottled), micaceous, sandy	102	405
Clay: gray to brick-red, micaceous, sandy		430
Sand: fine to coarse-grained, angular, arkosic; interbedded thin stringers of clay (or kaolin), gray to red (mottled),	71	501
micaceous, sandy	71	501

## Summary:

Paleocene (Clayton formation)	<b>20</b>	20
Upper Cretaceous (Providence sand)	<b>72</b>	92
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	88	180
Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	55	235
In Upper Cretaceous (Tuscaloosa formation)	<b>2</b> 66	501

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	67	175
Sand: fine to coarse-grained	25	210

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained	13	230
Sand: fine to coarse-grained	92	337
Sand: fine to coarse-grained	47	405
Sand: fine to coarse-grained		467
Sand: fine to coarse-grained	25	495

	PIERCE COUNTY			
,,	1 No.: GG 7.: 75	S 119		
	Thickness (feet)	Depth (feet)		
No samples	120	120		
In Miocene (Undifferentiated):				
Sand: fine to coarse-grained; limestone, white, rather dense (much calcitized), sandy, phosphatic		480		
Sand and limestone: as above; dolomitic limestone, light- brown, saccharoidal	105	585		
Oligocene (Undifferentiated):				
Sand and limestone: as above with more limestone at depth, light-gray to white at depth, much calcitized, nodular, sac- charoidal, fossiliferous (macroshells and Foraminifera)	15	600		
Quinqueloculina sp. at 585-600.				
Upper Eocene: Jackson Group: Ocala Limestone:				
Limestone: white to cream, sandier more calcitized and dolo- mitized at depth, fossiliferous (bryozoan and echinoid re- mains, some macroshells, and Foraminifera)	265	865		
Bryozoan remains prominent at 600-630.				
Camerina sp. at 675-690. Operculinoides floridensis, Lepidocyclina sp. at 690-705. Asterocyclina nassauensis at 705-720. Gypsina globula, Pseudophragmina flintensis at 720-735. Camerina striatoreticulata common at 735-750.				
Operculina mariannensis at 765-780.				
Limestone as above but much sandier at 780-810.				
Limestone as above but more dolomitized with depth at 810- 865.				

WELL	LOGS	OF	THE	COASTAL	Plain	$\mathbf{0F}$	GEORGIA
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	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Sand: fine to coarse-grained, phosphatic; dolomitic limestone, as above	135	1,000
Limestone: light-gray, massive, dense, much calcitized, some- what sandy, cherty (at certain horizons), fossiliferous (fragments and molds of macroshells, a coquina at certain horizons, bryozoan remains, and Foraminifera)	200	1,200
Asterocyclina monticellensis at 1085-1100. Lepidocyclina (Polylepidina) antillea at 1100-1115. Bryozoan remains prominent at 1115-1130.		
Dolomitic limestone: brown, saccharoidal; interbedded lime- stone, as above	170	1,370
Limestone: cream, poorly consolidated, granular, somewhat calcitized, cherty and gypsiferous at certain horizons, fos- siliferous (some Foraminifera at certain levels)	390	1,760
Operculinoides sp., Asterocyclina sp. prominent at 1490-1505.		
Dolomitic limestone: light-gray, saccharoidal, gypsiferous	120	1,880
Sand: fine to coarse-grained, phosphatic	15	1,895
Limestone: cream, granular, somewhat calcitized, coarsely glauconitic, dolomitized at certain horizons, fossiliferous (abundant bryozoan remains); interbedded sand, fine to		
medium-grained, phosphatic		1,970
Clay: yellowish-green, fissile, silty, micaceous	85	2,055
Marginulina sp. at 2000-2015.		
Cibicides tallahattensis at 2015-2030.		
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: light-gray, sandy, coarsely glauconitic		2,085
Marl: dark-gray, fissile, sandy, glauconitic, micaceous, pyriti- ferous, fossiliferous (Foraminifera)	35	2,120
Limestone: white, sandy, coarsely glauconitic, fossiliferous (fragments and molds of macroshells)	15	2,135
Sand: fine to coarse-grained, subangular, phosphatic	90	2,225
Eponides dorfi, Valvulineria wilcoxensis at 2090-2105. Alabamina, wilcoxensis at 2120-2135		

Alabamina wilcoxensis at 2120-2135.

	Thickness (feet)	Depth (feet)
Palocene: Midway Group: Clayton Formation:		
Limestone: white, dense, much calcitized and crystalline, fos- siliferous (macroshells, bryozoan remains, Ostracods, and some Foraminifera); interbedded clay, dark-gray to black, fissile, carbonaceous, micaceous (finely disseminated flakes), fossiliferous, (some Foraminifera)	75	2,300
Indurated sand: dark-gray to brown, fine-grained, phosphatic, glauconitic, micaceous, fossiliferous (macroshells, Ostra- cods, and Foraminifera at certain levels); interbedded marl, brown to dark-gray, silty, glauconitic, micaceous, fos- siliferous (Foraminifera at various levels)	420	2,720
Discorbis midwayensis var. at 2300-2315. Eponides lotus at 2322-2330. Vaginulina longiforma at 2390-2405.		
Upper Cretaceous: Post Tuscaloosa (Undifferentiated):		
Marl: dark-brown to bluish-gray, sandy, micaceous, pyriti- ferous, glauconitic, fossiliferous (macroshells, Ostracods, and Foraminifera)	495	3,215
Globotruncana sp. at 2720-2735. Globotruncana sp., Guembelina sp., Gaudryina sp. at 2750- 2765.		
Marl: brown, fissile, silty, glauconitic, carbonaceous, mica- ceous, fossiliferous (macro- and microfossils)	525	3,740
Planulina cf. P. texana, Globorotalia micheliniana at 3380- 3395. Planulina taylorensis at 3455-3470. Kyphopyxa christneri at 3560-3575. Vaginulina texana at 3695-3710.		
Sand: fine to coarse-grained, phosphatic, indurated at cer- tain horizons; interbedded marl, as above	135	3,875
Tuscaloosa Formation:		
Clay: gray to dark-green, fissile, sandy, finely micaceous, somewhat iron-stained; interbedded sand, fine to coarse- grained	75	3,950
Sand: fine to coarse-grained; interbedded clay, as above		4,205
Siderite nodules prominent at 3965-3980.	200	-,
Sand: fine to medium-grained, somewhat indurated, finely glauconitic, micaceous, fossiliferous (macroshells)	41	4,246

Lower Cretaceous(?) (Undifferentiated):	Thickness (feet)	Depth (feet)
Sand: fine-grained, highly micaceous; interbedded clay, green to red, sandy, micaceous	102	4,348
Basement Complex (Undifferentiated):		
Crystalline rock		4,375

#### Summary:

No samples 120	120
In Miocene (undifferentiated)	585
Oligocene (undifferentiated) 15	600
Upper Eocene (Ocala limestone) 265	865
Middle Eocene (Claiborne group, undifferentiated)1,190	2,055
Lower Eocene (Wilcox group, undifferentiated) 170	2,225
Paleocene (Clayton formation) 495	2,720
Upper Cretaceous (post-Tuscaloosa, undifferentiated)1,155	3,875
Upper Cretaceous (Tuscaloosa formation)	4,246
Lower Cretaceous(?) (undifferentiated) 102	4,348
Basement complex (undifferentiated) 27	4,375

### **Potential Water-Bearing Zones:**

Limestone	<b>220</b>	820
Sand: fine to coarse-grained	135	1,000
Limestone	200	1,200
Sand: fine to coarse-grained	65	2,200

### PIERCE COUNTY

Location: 2.3 mi. northeast of Offerman, Land Lot 332, 4th Land District	Well No.: GGS 120 Elev.: 75
Owner: No. 1 Donald Clark Driller: W. B. Hinton Drilled: May 1939	
	Thickness Depth (feet) (feet)

### Summary:

No samples	111	111
In Miocene (undifferentiated)	539	650
Oligocene (undifferentiated)	51	701
Upper Eocene (Ocala limestone)	174	875
Middle Eocene (Claiborne group, undifferentiated)	1,220	2,095
Lower Eocene (Wilcox group, undifferentiated)	290	2,385

	Thickness (feet)	Depth (feet)
Paleocene (Clayton formation)		2,750
Cretaceous (undifferentiated)	1,598	4,348
First observed Globotruncana sp. at 2747-2778.		
First observed Anomalina henbesti at 3322-3353.		
First observed Planulina texana at 3414-3444.		
First observed Kyphopyxa christneri at 3444-3474.		
First observed Vaginulina texana at 3598-3629.		
Basement complex (undifferentiated)	7	4,355

#### **Remarks:**

Samples of poor quality. Formational tops noted above are approximate.

### PIERCE COUNTY

Location: In Patterson	Well No.: GGS 465
Owner: No. 1 J. C. Echols	Elev.: $105^{1}$
Driller: Layne-Atlantic Company	
Drilled: 1955	
·	Thickness Depth (feet) (feet)

### Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, finely disseminated phosphatic grains; interbedded clay, gray to tan to purple (mottled),		
sandy	30	30
Sand: fine to coarse-grained, angular, arkosic	115	145
In Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic; interbedded sand, fine to coarse-grained	50	195
Black, phosphatic pebbles prominent at 165-175.		
Clay: dark-green, sandy, phosphatic	115	310
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; some limestone, white, dense, much calcitized, sandy	20	330
Sand: fine to coarse-grained, phosphatic	80	410
Limestone: white, dense, much calcitized, sandy, phosphatic; interbedded sand, fine to coarse-grained, phosphatic; dolo- mitic limestone, light-brown, saccharoidal, sandy, phos- phatic; clay, dark-green, sandy, phosphatic	80	490
<sup>1</sup> Average elevation based on Georgia State Highway Maps.		

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	Ł	323
	Thickness (feet)	Depth (feet)
Limestone: white, dense, much calcitized, phosphatic, fossili- ferous (casts and molds of megafossils)	68	558
Dolomitic limestone: dark-brown, saccharoidal, sandy, phos- phatic, fossiliferous (molds and impressions of megafossils)	42	600
Oligocene (Undifferentiated):		
Limestone: cream, recrystallized (much calcitized), nodular, somewhat oolitic?, fossiliferous (Foraminifera)	20	620
$Dictyoconus^2$ sp., $Quinqueloculina$ sp. at 600-620.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray to white, extremely dense (much cal- citized), fossiliferous (echinoid and bryozoan remains and Foraminifera)	48	668
Operculinoides sp. at 620-640.		
Operculinoides ocanalus, Asterocyclina nassauensis, Pseudo- phragmina flintensis, Gypsina globula, Argyrotheca sp. at 660-668.		
Summary:		
Pliocene to Recent (undifferentiated)		145
In Miocene (undifferentiated)		600
Oligocene (undifferentiated)		620
Upper Eocene (Ocala limestone)	48	668
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		410
Limestone	68	668
DIT		
r IP	ERCE COU	NTY
Location: Web Owner: No. 1 Pierce County Training School Driller: M. M. Gray Drilling Company Drilled: 1956	ll No.: GG	S 516
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, arkosic, with kaolin inclusions		20
Clay: light-gray to red (mottled), sandy	10	30
<sup>2</sup> Reworked(?) fossil of middle Eocene age.		

	Thickness (feet)	Depth (feet)
Sand: very coarse-grained, angular, arkosic; some clay, as above	e 10	40
Miocene (Undifferentiated):		
Clay: yellowish-green, sandy, finely disseminated phosphatic grains	20	60
Sand: fine to coarse-grained, angular, phosphatic, arkosic	. 10	70
Clay: yellowish-green, sandy	. 10	80
Sand: fine to coarse-grained, arkosic	50	130
Black, phosphatic pebbles prominent at 120-130.		
Clay: dark-green, sandy, phosphatic	50	180
Sand: fine to coarse-grained, phosphatic	100	280
Clay: dark-green, sandy, phosphatic	100	380
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; interbedded sand, fine to coarse-grained, phos- phatic; clay, dark-green, sandy, phosphatic	80	460
Dolomitic limestone: as above		500
Oligocene (Undifferentiated):		
Limestone: cream, dense (much calcitized), fossiliferous (molluscan remains and abundant Foraminifera)	. 145	645
$Dictyoconus^1$ sp. and abundant fossils belonging to the family <i>Miliolidae</i> at 500-510.		
Summary:		

Pliocene to Recent (undifferentiated)	<b>40</b>	40
Miocene (undifferentiated)	460	500
Oligocene (undifferentiated)	145	645

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	50	130
Sand: fine to coarse-grained	100	280
Limestone	145	645

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

PULASKI COUNTY

Location: Near east end of bridge over Ocmulgee River, 34 yd. northeast of R.R., 40 ft. southwest of dwelling in Hartford Owner: No. 1 J. D. Lytle Driller: H. <sup>48</sup> B. Truluck Drilled: September 1951	Well No.: GGS 237 Elev.: 230
	Thickness Depth (feet) (feet)

## **Residuum:**

Sand: fine to coarse-grained, argillaceous, brick-red, cherty, and fragments of residual limestone	40	40
Upper Eocene: Jackson Group: Cooper Marl:		
Marl: cream, very sandy, fossiliferous (echinoid and bryozoan remains and Foraminifera)	10	50
Robulus alato-limbatus, Eponides jacksonensis, Planulina cooperensis at 40-50.		

### **Barnwell Formation:**

Limestone: gray, rather crystalline and saccharoidal, coarse- ly glauconitic; some marl, silty, carbonaceous	10	60
Marl: gray, silty, carbonaceous, somewhat indurated, fos- · siliferous (Foraminifera)	30	90
Limestone: gray, fossiliferous (abundant bryozoan remains and Foraminifera at depth)	40	130
Operculinoides sp., Asterocyclina sp. at 100-110.		
Sand: fine to coarse-grained, angular	30	160

## Summary:

Residuum	40	40
Upper Eocene (Cooper marl)	10	50
Upper Eocene (Barnwell formation)	110	160

## **Potential Water-Bearing Zones:**

Limestone	40	130
Sand: fine to coarse-grained	30	160

## PULASKI COUNTY

		01.1
of R.R., 40 ft. south of dwelling in Hartford Owner: No. 1 Fred E. Thompson	Well No.: GG Elev.: 239	S 238
Driller: H. B. Truluck		
Drilled: September 1951	Thickness (feet)	Depth (feet)
Residuum:		
Sand: fine to coarse-grained, argillaceous, brick-red, li nitic, cherty, and fragments of residual limestone		50
Rotalia mexicana var. at 20-30.		
Upper Eocene: Jackson Group: Cooper Marl:		
Marl: cream, very sandy, fossiliferous (echinoid and bryoz remains and Foraminifera)		60
Eponides jacksonensis, Eponides cocoaensis, Planu cooperensis at 50-60.	lina	
Barnwell Formation:		
Marl: gray, silty, fossiliferous (echinoid and bryozoan mains and Foraminifera); with thin beds of limestone		100
Limestone: gray, rather porous, fossiliferous (megafos echinoid and bryozoan remains and Foraminifera)		140
Abundant echinoid and bryozoan remains at 100-110. Robulus limbosus var., Gypsina globula at 110-120. Operculinoides sp., Lepidocyclina sp. at 120-130. Eponides jacksonensis, Operculina mariannensis at 130-	140.	
Sand: fine to coarse-grained, angular	10	150
Summary:		
Residuum	50	50
Upper Eocene (Cooper marl)		50 60
Upper Eocene (Barnwell formation)		150
Potential Water-Bearing Zones:		
Limestone		140
Sand: fine to coarse-grained		150
-		

#### PULASKI COUNTY

Location: 2 mi. northwest of Hawkinsville city limits,	Well No.: GGS 242
north side of U.S. Highway 341	Elev.: 321
Owner: No. 1 T. M. Linder	
Driller: H. B. Truluck	
Drilled: 1951	
	Thickness Depth (feet) (feet)

#### **Residuum**:

Clay:	mottled,	sandy,	limonitic,	and	fragments	of	residual		
lime	estone							85	85

Rotalia mexicana var., Quinqueloculina sp. at 0-10.

#### Upper Eocene: Jackson Group: Cooper Marl:

Marl: gray, silt	y, fossiliferous (echinoid and bryozoan re-		
mains and so	ne Foraminifera)	25	110

Valvulineria jacksonensis at 90-100.

#### Summary:

Residuum	85	85
Upper Eocene (Cooper marl)	<b>25</b>	110

#### **Potential Water-Bearing Zones:**

None observed to total depth (110). However, aquifers may be found beneath this well at various levels below 110.

#### **PULASKI COUNTY**

•	Well No.: G Elev.: 235	GS 256
	Thickness (feet)	5 Depth (feet)
Residuum :		
Sand: fine to coarse-grained, argillaceous, limonitic, che	rty,	

#### and scattered fragments of residual limestone 30 30 Upper Eocene: Jackson Group: Cooper Marl: Marl: cream, very sandy, fossiliferous (Foraminifera) 2050Bulimina jacksonensis, Eponides jacksonensis, Planulina

cooperensis at 30-40.

Barnwell Formation:	Thickness (feet)	Depth (feet)
Marl: gray, silty, fossiliferous (echinoid and bryozoan re- mains, and Foraminifera); interbedded limestone, cream, glauconitic	60	110
Textularia hockleyensis at 90-100.		
Limestone: cream, fossiliferous (echinoid and bryozoan re- mains and Foraminifera)	30	<b>140</b>
Abundant bryozoan remains at 110-120. <i>Lepidocyclina</i> sp. at 130-140.		
Sand: fine to coarse-grained, angular	10	150
Summary:		
•	9.0	90
Residuum Upper Eocene (Cooper marl)		30 50
Upper Eocene (Barnwell formation)		150
Potential Water-Bearing Zones:		
Limestone		140
Sand: fine to coarse-grained	10	150
PU	LASKI CO	UNTY
Location: Near Ocmulgee River in HawkinsvilleWeOwner: No. 1 Opelika Mfg. CompanyEleDriller: Virginia Supply and Well Company	LASKI CO ll No.: GG v.: 245	
Location: Near Ocmulgee River in Hawkinsville We Owner: No. 1 Opelika Mfg. Company Ele	11 No.: GG	
Location: Near Ocmulgee River in HawkinsvilleWeOwner: No. 1 Opelika Mfg. CompanyEleDriller: Virginia Supply and Well Company	ll No.: GG v.: 245 Thickness	S 339 Depth
Location: Near Ocmulgee River in Hawkinsville We Owner: No. 1 Opelika Mfg. Company Ele Driller: Virginia Supply and Well Company Drilled: March 1953	ll No.: GG v.: 245 Thickness (feet)	S 339 Depth
Location: Near Ocmulgee River in Hawkinsville       We         Owner: No. 1 Opelika Mfg. Company       Ele         Driller: Virginia Supply and Well Company       Drilled:         Drilled: March 1953       Residuum:	ll No.: GGS v.: 245 Thickness (feet)	B 339 Depth (feet)
Location: Near Ocmulgee River in Hawkinsville       We         Owner: No. 1 Opelika Mfg. Company       Ele         Driller: Virginia Supply and Well Company       Drilled:         Drilled: March 1953       Residuum:         Sand: fine to coarse-grained, subangular, limonitic       Clay: brown to olive-green, somewhat mottled, sandy, limonitic; fragments of residual limestone, yellow, much leach-	ll No.: GGS v.: 245 Thickness (feet)	Depth (feet)
Location: Near Ocmulgee River in Hawkinsville       We         Owner: No. 1 Opelika Mfg. Company       Ele         Driller: Virginia Supply and Well Company       Drilled:         Drilled: March 1953       March 1953         Residuum:       Sand: fine to coarse-grained, subangular, limonitic         Clay: brown to olive-green, somewhat mottled, sandy, limonitic; fragments of residual limestone, yellow, much leached, sandy, fossiliferous (some Foraminifera)         Quinqueloculina sp., Rotalia mexicana var., Asterigerina sub-	ll No.: GGS v.: 245 Thickness (feet)	Depth (feet)
Location: Near Ocmulgee River in Hawkinsville       We         Owner: No. 1 Opelika Mfg. Company       Ele         Driller: Virginia Supply and Well Company       Drilled:         Drilled: March 1953       March 1953         Residuum:         Sand: fine to coarse-grained, subangular, limonitic         Clay: brown to olive-green, somewhat mottled, sandy, limonitic; fragments of residual limestone, yellow, much leached, sandy, fossiliferous (some Foraminifera)         Quinqueloculina sp., Rotalia mexicana var., Asterigerina subacuta at 5-25.	11 No.: GG3 v.: 245 Thickness (feet) 5	Depth (feet)

	Thickness (feet)	Depth (feet)
Limestone (or indurated sand?): white to yellow, abundantly arenaceous, fossiliferous (some Foraminifera)	15	45
Lepidocyclina sp., Alabamina atlantisae, Cibicides sp. at 30-45.		
Barnwell Formation:		
Marl: light-gray, sandy, glauconitic, fossiliferous (carrying bryozoan and echinoid remains, Ostracods, and Foramini- fera); interbedded limestone, light-gray, much calcitized, crystalline, sandy, glauconitic, fossiliferous (fragments and molds of megafossils)	56	101
Textularia hockleyensis, Robulus alato-limbatus, Dentalina jacksonensis, Nonion advena, Discorbis assulata, Discorbis cf. D. subaraucana, Nodosaria fissicostata, Guttulina ir- regularis, Sigmomorphina jacksonensis, Valvulineria jack- sonensis, Cibicides danvillensis, Planulina cocoaensis at 45-55.		
Limestone: gray, crystalline, somewhat saccharoidal, fossili- ferous (macroshells, echinoid and abundant bryozoan re- mains, and Foraminifera)	39	140
Gypsina globula, Lepidocyclina sp., Asterocyclina sp., Oper- culina mariannensis at 120-140.		
Sand: medium to coarse-grained	10	150
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: gray, silty, fossiliferous (macroshells and Foramini- fera); interbedded sand, fine to coarse-grained, angular, glauconitic, at depth, fossiliferous (macroshell coquina)	109	259
Cibicides westi at 172-175.		
Macroshells common at 187-207.		
Glauconite prominent at 231-247.		
Limestone: gray, dense, crystalline, sandy, glauconitic, inter- bedded marl as above	20	279
Pink, sericitic clay prominent at 259-265.		
Tallahatta Formation:		
Clay: dark-brown, somewhat fissile, glauconitic, lignitic; in- terbedded sand, fine to coarse-grained	40	319

	Thickness (feet)	Depth (feet)
Summary:	(1007)	(1000)
Residuum		25
Upper Eocene (Cooper marl)		45
Upper Eocene (Barnwell formation)	105	150
Middle Eocene (Lisbon formation)	129	279
Middle Eocene (Tallahatta formation)	40	319
Potential Water-Bearing Zones:		140
Sand: medium to coarse-grained		150
Sand: fine to coarse-grained		220
Sand: fine to coarse-grained	16	247
Sand: fine to coarse-grained	31	316

#### Remarks:

Limestones belonging to the Claiborne group are too dense and nonporous to constitute good water-bearing formations.

The more productive water-bearing sands for the area lie below the total depth (319) penetrated by this well. Such aquifers are of Upper Cretaceous age.

### PULASKI COUNTY

Location: 4 mi. south of Pulaski-Bleckley County line,	Well No.: GGS 472
east side of U.S. Highway 26, Land Lot 306, 21st Land	Elev.: 280
District	
Owner: No. 1 E. H. Tripp	
Driller: Ainsworth, Inc.	
Drilled: October 1954	
	Thickness Depth (feet) (feet)

### **Residuum**:

Clay: mottled, very sandy, limonitic, and fragments of resi-		
dual limestone (at depth)	80	80
Rotalia mexicana var. at 70-80.		

### Oligocene (Undifferentiated):

Limestone: yellow, nodular, somewhat iron-stained, leached,		
cherty, fossiliferous (echinoid and frequent bryozoan re-		
mains, and some Foraminifera)	20	100

Asterigerina sp., Eponides byramensis at 100-110.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L	331
Upper Eocene: Jackson Group: Cooper Marl:	Thickness (feet)	Depth (feet)
<ul> <li>Limestone: cream, granular, loosely consolidated (gray, dense, somewhat saccharoidal, sandy, coarsely glauconitic at depth), fossiliferous (echinoid and bryozoan remains, Ostracods, and Foraminifera)</li> <li>Bulimina jacksonensis, Uvigerina jacksonensis, Uvigerina topilensis, Spiroplectammina mississippiensis var., Cibicides lobatulus at 110-120.</li> </ul>	15	115
Indurated sand: fine-grained, angular, fossiliferous (casts and molds of megafossils)	20	135
Barnwell Formation:		
Marl: gray, silty, somewhat indurated, carbonaceous, fossili- ferous (echinoid and bryozoan remains, Ostracods and Foraminifera)	40	175
Nonion advena, Valvulineria jacksonensis at 150-160.		
Limestone: gray, dense, coarsely glauconitic, sandy, fossili- ferous (casts and molds of megafossils, echinoid and abun- dant bryozoan remains)	35	210
Limestone: cream, porous, coarsely glauconitic, sandier with depth, fossiliferous (echinoid and abundant bryozoan re- mains, and Foraminifera)	45	255
Operculina mariannensis, Lepidocyclina ocalana at 210-220. Asterocyclina nassauensis, Camerina striatoreticulata at 220-230.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: gray to dark-green, somewhat indurated, carbonaceous, micaceous, glauconitic (finely disseminated); interbedded		

micaceous, glauconitic (finely disseminated); interbedded		
limestone, gray, dense, sandy, glauconitic (finely dissemi-		
nated); sand, fine to coarse-grained, angular, fossiliferous		
(a coquina)	125	380

Macroshells prominent at 255-280.

Nonion advena, Gryoidina soldanii var., Cibicides danvillensis, Cibicides americanus var., Cibicides pseudoungerianus var. lisbonensis, Cibicides mississippiensis, Cibicides westi at 280-290.

Pink sericitic clay prominent at 360-370.

Tallahatta Formation:	Thickness (feet)	Depth (feet)
Marl: dark-green, sandy, coarsely glauconitic, pyritiferous, fossiliferous (macroshells, Ostracods and Foraminifera)	70	450
Cibicides blanpiedi, Cibicides tallahattensis at 390-400. Asterocyclina monticellensis, Cibicides pseudoungerianus var. lisbonensis, Cibicides blanpiedi, Cibicides tallahattensis at 400-410.		
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Sand: fine to medium-grained, angular, sideritic, lignitic; in- terbedded clay, black, carbonaceous, micaceous	35	485
Sideritic nodules abundant at 450-460.		
Sand: coarse-grained, angular, arkosic, sideritic, pyritiferous, lignitic; interbedded kaolin, white to red (mottled), mica- ceous	305	790
Pink kaolin prominent at 680-700.		
Clay: dark-gray to black, micaceous, carbonaceous	145	935
Limestone, gray, dense, crystalline, sandy, glauconitic, mac- roshells prominent at 840-855.		
Clay: dark-brown, silty, carbonaceous, highly micaceous		955
Sand: coarse-grained, angular, arkosic; interbedded clay, dark-brown, silty, carbonaceous, highly micaceous	195	1,150
Clay: dark-brown, silty, carbonaceous, very micaceous, fos- siliferous (casts of megafossils); sand	50	1,200
Sand: coarse-grained, angular, arkosic; interbedded clay, dark-brown, silty, carbonaceous, very micaceous	170	1,370
In Tuscaloosa Formation:		
Sand: fine to coarse-grained, arkosic, rather massive; inter- bedded clay, yellowish-green, sandy, somewhat carbona- ceous, micaceous	140	1,510
Sand: fine to coarse-grained, angular, arkosic; interbedded clay, yellowish-green, red to purple at depth, somewhat carbonaceous, sandy, micaceous	650	2,160
In Lower Cretaceous(?)		
Sand: very coarse-grained, angular, extremely arkosic; in-		
terbedded clay, olive-green to tan to brick-red, very mica-	902	9 197

ceous, sandy \_\_\_\_\_ 328

2,487

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Thickness Depth (feet) (feet)

### Summary:

Residuum	80	80
Oligocene (undifferentiated)	20	100
Upper Eocene (Cooper marl)	35	135
Upper Eocene (Barnwell formation)	120	255
Middle Eocene (Lisbon formation)	125	380
Middle Eocene (Tallahatta formation)	70	450
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	920	1,370
In Upper Cretaceous (Tuscaloosa formation)	790	2,160
In Lower Cretaceous (?)	328	<sup>2</sup> 2,488

#### **Potential Water-Bearing Zones:**

Limestone	80	255
Sand: coarse-grained	<b>250</b>	790
Sand: coarse-grained	200	1,150
Sand: fine to coarse-grained	140	1,510

## QUITMAN COUNTY

Location: 0.9 mi. east of road intersection in George-	Well No.: GGS 436
town, 0.4 mi. east of junction of Highways 27 and 50,	Elev.: 341
north side of Highway 50 at school house	
Owner: No. 1 Kaigler School	
Driller: Gray Artesian Well Company	
Drilled: May 1955	
	Thickness Depth (feet) (feet)

#### Pliocene to Recent (Undifferentiated):

Clay: mottled, sandy	11	11
Sand: fine to medium-grained, coarser-grained at depth, angular; some clay, as above	31	42
Sand: fine to coarse-grained, angular; some clay, tan, sandy, micaceous	9	51
Gravel: pea-size grains, subrounded	5	56

### **Upper Cretaceous:** Providence Sand:

Marl:	dark	bluish-gr	ay, sandy,	mic	aceous,	fossilifer	ous at		
dept	h (ma	croshells,	Ostracods	and	Foram	inifera) _		39	95

Anomalina pseudopapilloso at 72-82.

<sup>&</sup>lt;sup>3</sup>This well reportedly penetrated the Basement complex. Samples in our collection reached a total depth of 2488.

	Thickness (feet)	Depth (feet)
Indurated sand (or sandy limestone): gray, fine-grained,		
dense	. 3	98
Marl: dark bluish-gray, sandy, micaceous	. 13	111
Indurated sand (or sandy limestone): as above	. 2	113
Marl: dark-gray, silty, micaceous, pyritiferous	. 79	192

#### **Ripley Formation:**

Marl: dark bluish-gray, silty, micaceous, pyritiferous, glau-		
conitic, fossiliferous (at certain horizons, macroshells,		
Ostracods and Foraminifera)	203	395

Gaudryina rudita, Cibicides harperi at 212-232.

#### Summary:

Pliocene to Recent (undifferentiated)	56	<b>56</b>
Upper Cretaceous (Providence sand)	136	192
Upper Cretaceous (Ripley formation)	203	395

#### **Potential Water-Bearing Zones:**

None observed to total depth of well.

#### **Remarks:**

Owing to scarcity of water-bearing sands, this well is in an area in which it is difficult to obtain ground water. It is doubtful that the shallow-lying terrace gravels would be perennially productive. Moreover, the indurated sand (or sandy limestone) at depths 95-98 and 111-113 are not thought to be of sufficient thickness to carry water in sufficient quantity to satisfy even domestic needs. The best aquifers, therefore, should be sought at considerably lower depths than that reached by this well. Such water-bearing sands would be encountered in the underlying Eutaw formation and in the more deeply buried Tuscaloosa formation.

### QUITMAN COUNTY

Location: In Georgetown	Well No.: GGS	502
Owner: No. 1 City of Georgetown	Elev.: 316	
Driller: Layne-Atlantic Company		
Drilled: October 1956		
	Thickness (feet)	Depth (feet)

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

Marl: dark bluish-gray to black, sandy, micaceous, pyritiferous, glauconitic, fossiliferous (macroshells, Ostracods,

Well	Logs	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA

	Thickness (feet)	Depth (feet)
and Foraminifera at certain levels); interbedded indurated sand (or sandstone), dark-gray, argillaceous, micaceous, pyritiferous, glauconitic, fossiliferous (macroshells at cer- tain horizons)	350	350
Anomalina pseudopapillosa at 115-125. Epistomina caracolla, Cibicides harperi at 125-135. Globotruncana cretacea, Loxostoma plaitum, Planulina correcta at 208-218. Clavulinoides trilatera var., Robulus navarroensis, Robulus		
pondi at 235-246. Marl: dark-gray to brownish at depth, micaceous, somewhat carbonaceous (lignitic), sandy, fossiliferous (macroshells, Ostracods, and Foraminifera at certain levels)	90	440
Planulina taylorensis at 350-360.		
Cusseta Sand:		
Sand: fine to coarse-grained, subangular, indurated at cer- tain levels, micaceous; interbedded marl (or shale), as above	e 75	515
Blufftown Formation:		
Shale: dark-brown, fissile, splintery at depth, carbonaceous, micaceous, fossiliferous (macroshells, Ostracods, and Fora- minifera at certain levels)	525	1,040
Vaginulina texana, Kyphopyxa christneri at 525-535.		
Sand: fine to medium-grained, subangular, somewhat in- durated at certain levels, micaceous, glauconitic, phos- phatic, fossiliferous (macroshells, Ostracods at certain levels)	70	1,110
Sand: fine to coarse-grained, subangular, pyritiferous, glau- conitic, phosphatic, fossiliferous at certain levels (coquina and occasional fish teeth); fairly numerous thin stringers		·
of shale, as above	128	1,238
In Eutaw Formation:		
Shale: yellowish-green to dark-brown to black, fissile, some- what splintery, micaceous, carbonaceous; interbedded sand, fine to medium-grained, subangular, phosphatic, micaceous.		1,325
Sand: fine to medium-grained, subangular		1,360
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic, micaceous; interbedded clay, greenish-gray, somewhat fissile, sandy,		

micaceous, iron-stained at certain levels \_\_\_\_\_ 140 1,500

	Thickness (feet)	Depth (feet)
Summary:		
Upper Cretaceous (Providence and Ripley, undifferentiated)	440	440
Upper Cretaceous (Cusseta sand)		515
Upper Cretaceous (Blufftown formation)		1,238
In Upper Cretaceous (Eutaw formation)	122	1,360
Upper Cretaceous (Tuscaloosa formation)		1,500
Potential Water-Bearing Zones:		
Sand: fine to medium-grained		1,360
Sand: fine to coarse-grained		1,377

-0	-,
9	1,404
<b>24</b>	$1,\!434$
13	1,460
	<b>24</b>

## **RANDOLPH COUNTY**

Location: In Cuthbert Owner: City of Cuthbert Driller: Layne-Atlantic Company Drilled: 1958	Well No.: GGS Elev.: 460	552
Dimet. 1990	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group (Undifferentiated):		
Sand: fine to coarse-grained, angular, argillaceous, brid limonitic, sparsely glauconitic		<b>44</b> .
Sand: as above; some clay, yellowish-green, sandy, mic	aceous 20	64
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: light-gray, silty, micaceous, carbonaceous		146
Sand: fine to medium-grained, subangular, abundantly conitic	0	156
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, pale-green grains; interbedded clay, black, somewhat fissile, ca ceous, micaceous	rbona-	237
Limestone: gray, dense, nodular, somewhat sandy, pyr ous, fossiliferous (fragments, casts and molds of fossils, bryozoan remains, and Foraminifera)	mega-	310
Limestone: as above but very sandy		331

Upper Cretaceous: Providence Sand:	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, somewhat angular	7	338
Marl: bluish-gray, silty, chalky, micaceous, pyritiferous, fos- siliferous (some Foraminifera)	13	351
Anomalina pseudopapillosa, Epistomina caracolla at 338- 346.		

#### Summary:

Middle Eocene (Claiborne group, undifferentiated)	64	64
Lower Eocene (Wilcox group, undifferentiated)	92	156
Paleocene (Clayton formation)	175	331
Upper Cretaceous (Providence sand)	20	351

### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	91	237
Limestone	73	310
Sand: fine to coarse-grained	7	338

### **RICHMOND COUNTY**

Owner: No. 1 Georgia Training School (Circular Elev.: Court)	Io.: GGS 1 136	129
Driller: Virginia Machine and Well Company Drilled: February 1940		
· · · · · · · · · · · · · · · · · · ·	Thickness (feet)	Depth (feet)
No samples		9
In Upper Cretaceous: Tuscaloosa Formation:		
Kaolin: white, micaceous, sandy; interbedded sand, fine to coarse-grained, angular, arkosic	131	140
Sand: medium to coarse-grained, angular, arkosic, with in- clusions of kaolin (clay balls)	18	158
Kaolin: yellow to white, micaceous, very sandy, limonitic	4	162
Brown limonitic pellets prominent at 160-162.		
Basement Complex (Undifferentiated):		
Clay: bluish-gray, sandy, highly micaceous	13	175
Crystalline rock	154	329

	Thickness (feet)	Depth (feet)	
Summary:	(,	(,	
No samples		9	
In Upper Cretaceous (Tuscaloosa formation)		162	
Basement complex (undifferentiated)	167	329	
Potential Water-Bearing Zones:			
Sand: medium to coarse-grained		158	
Fractures and voids in Basement complex		329	

### RICHMOND COUNTY

1,200

Location: Augusta	Well No.: GGS 130
Owner: No. 2, Georgia Training School (Circular	Elev.: 136
Court)	
Driller: Virginia Machine and Well Company	
Drilled: May 1940	
	Thickness Depth (feet) (feet)

# Upper Cretaceous: Tuscaloosa Formation:

Sand: fine to coarse-grained, brown, argillaceous, arkosic	10	10
Kaolin: gray to cream, micaceous	15	25
Kaolin: brick-red, micaceous, very sandy, limonitic	25	50
Kaolin: gray to pink, micaceous, sandy	45	95
Kaolin: white to gray to yellow, micaceous	40	135
Sand: fine to medium-grained, angular with inclusions of		
kaolin (clay balls)	10	145
Kaolin: gray to yellow to tan to red, micaceous, sandy	50	195
Sand: fine to coarse-grained, angular, with inclusions of		
kaolin (clay balls)	20	215
Kaolin: white to gray to yellow to pink, very sandy, micaceous	80	295
Sand: fine to coarse-grained, angular, arkosic	10	305
Basement Complex (Undifferentiated):		
Clay: olive-green to tan, sandy, highly micaceous	20	325
Clay: as above, but dark bluish-green	5	330

Crystalline rock 870

	Summary:	Thickness (feet)	Depth (feet)
011	(Tuscaloosa formation) (undifferentiated)		305 1,200

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	10	215
Sand: fine to coarse-grained	10	305
Fractures and voids in basement complex	870	1,200

### **RICHMOND COUNTY**

Location: At Hotel Bon Aire, Augusta Owner: No. 1 Hotel Bon Aire Driller: Virginia Supply and Well Company Drilled: May 1952	Well No.: Elev.: 330		309
Drineu: May 1952		ckness feet)	Depth (feet)
No samples		15	15
In Upper Eocene: Jackson Group, Barnwell Formation:			
Clay: light-brown, sandy, micaceous		20	35
Upper Cretaceous: Tuscaloosa Formation:			
Kaolin: white, micaceous, very sandy	·	25	60
Kaolin: white to gray to brick-red to purple (mottled), ceous, limonitic		60	120
Sand: fine to coarse-grained		10	130
Kaolin: white, micaceous, very sandy		10	140
Sand: fine to coarse-grained		18	158
Basement Complex (Undifferentiated) <sup>1</sup> :			
Clay: gray, micaceous		2	160
Schist: green, chloritic		320	480
Summary			

#### Summary:

No samples	15	15
In upper Eocene (Barnwell formation)	20	35
Upper Cretaceous (Tuscaloosa formation)	123	158
Basement complex (undifferentiated)	322	480

<sup>1</sup>Probably Little River Series of Precambrian(?) age.

	fhickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	10	130
Sand: fine to coarse-grained	. 18	158
Schist	100	260

## **RICHMOND COUNTY**

Location: Silver Crest and Fleming Heights, Grace- wood Elev.: Owner: No. 1 Silver Crest School Driller: Virginia Supply and Well Company Drilled: January 1954	No.: GGS : 272	371
· · · · · · · · · · · · · · · · · · ·	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:		
Clay: gray to brown to red (mottled), sandy, limonitic		20
Clay: as above; inclusions of kaolin, white, micaceous, some- what sandy	10	30
Upper Cretaceous: Tuscaloosa Formation:		
Kaolin: white, micaceous, somewhat sandy	10	40
Clay: light-brown, micaceous, rather sandy		50
No samples	5	55
Kaolin: white, micaceous, sandy; interbedded sand, fine to coarse-grained	180	235
Sand: fine to coarse-grained	15	250
Kaolin: white, micaceous, sandy	5	255
Clay: light-brown, micaceous, very sandy	7	262

## Summary:

Upper Eocene (Barnwell formation)	30	30
Upper Cretaceous (Tuscaloosa formation)	232	262

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained	20	120
Sand: fine to coarse-grained	10	150
Sand: fine to coarse-grained	15	250

#### **RICHMOND COUNTY**

Location: Hephzibah Well No Owner: No. 1 City of Hephzibah Elev.: 4 Driller: Layne-Atlantic Company		26
	hickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:		
Sand: fine to coarse-grained, angular; some clay, brick-red, sandy	15	15
Sand: fine to coarse-grained, angular, arkosic, with inclu- sions of kaolin; interbedded clay, yellowish-green to tan to red (somewhat mottled), sandy	125	140
Upper Cretaceous: Tuscaloosa Formation:		
Kaolin: gray to pink, white at depth, micaceous, somewhat sandy	45	185
Kaolin: gray to purple (mottled), sandy, sandier with depth	75	260
Sand: coarse-grained, angular, arkosic	15	275
No samples	13	288
Sand: coarse-grained, angular, arkosic	10	298
Sand: as above, inclusions of clay	12	310
Sand: coarse-grained, angular, arkosic	20	330
Kaolin: cream to red (mottled), micaceous, sandy	20	350
Summary:		
Upper Eocene (Barnwell formation) Upper Cretaceous (Tuscaloosa formation)		$\begin{array}{c} 140\\ 350\end{array}$
Potential Water-Bearing Zones:		
Sand: coarse-grained		275 298

Sand: coarse-grained

330

### SCHLEY COUNTY

		1 No.: GGS 75 7.: 567	
·	Thickness (feet)	Depth (feet)	
No samples		120	
In Upper Cretaceous: Providence Sand:			
Sand: fine to coarse-grained, limonitic		128	
No samples	12	140	
In Ripley Formation:			
Clay: bluish-gray to black, micaceous; some sand, fine coarse-grained		600	
No samples		710	
In Blufftown Formation:			
Clay: dark-brown, somewhat fissile, silty, highly micaceo carbonaceous, pyritiferous, glauconitic and fossiliferous depth	at	860	
Vaginulina texana at 800-860.			

#### Summary:

No samples	120	120
In Upper Cretaceous (Providence sand)		128
No samples	12	140
In Upper Cretaceous (Ripley formation)	460	600
No samples	110	710
In Upper Cretaceous (Blufftown formation)	150	860

### **Potential Water-Bearing Zones:**

Available samples too fragmentary and sketchy to permit determination of formational tops of water-bearing zones.

#### SCHLEY COUNTY

Location: Approximately 200 ft. east of well drilled in 1937 at City Water Works, Ellaville	Well No.: GGS 174 Elev.: 567
Owner: No. 2 City of Ellaville	
Driller: Layne-Atlantic Company	
Drilled: July 1948	

#### Thickness Depth (feet) (feet) Middle and Lower Eocene (Undifferentiated): Clay: brick-red, very sandy, limonitic; fragments of clay, dark-gray, silty, lignitic, micaceous; inclusions of kaolin, white, micaceous 25 25 Sand: fine to coarse-grained, angular; some clay, as above..... 2348 Sand: as above; some clay, gray to ochre, micaceous 30 78 **Paleocene: Midway Group: Clayton Formation:** Clay: dark-gray to black, somewhat blocky and indurated, carbonaceous, micaceous (finely disseminated), glauconitic at depth; inclusions of kaolin, white, micaceous (latter probably "cave" from above) 12 90 Robulus cf. R. midwayensis at 90-98. Limestone: gray, dense, crystalline, sandy, glauconitic at depth, fossiliferous (fragments and casts and molds of macroshells and bryozoan remains) 8 98 **Upper Cretaceous: Providence Sand:** 127 Kaolin: white to red (mottled), micaceous, and cave from above. 29 Clay: gray to brown, somewhat blocky and indurated, carbonaceous, micaceous (finely disseminated), fossiliferous (some Foraminifera) 8 135Cibicides howelli, Anomalina sp. at 127-135. Clay: light-gray to tan, somewhat iron-stained, indurated, fissile, micaceous; sand, fine to coarse-grained, angular, and 158 some cave from above 23 Sand: fine to coarse-grained, angular, sideritic; interbedded 265kaolin, white to pink (mottled), micaceous 107 In Ripley Formation: Sand: fine to medium-grained, lignitic, sideritic, pyritiferous;

interbedded clay, black, somewhat fissile, micaceous, carbon-

aceous

325

	Thickness (feet)	Depth (feet)
Marl: gray to black, micaceous, carbonaceous, pyritiferous, fossiliferous (macroshells, Ostracods, and Foraminifera)	125	450
Robulus stephensoni, Gaudryina rudita, Loxostoma plai- tum, Anomalina clementiana, Anomalina pseudopapillosa at 325-350.		
No samples	14	464
In Cusseta(?) Sand:		
Sand: fine to coarse-grained, angular, arkosic, limonitic; in- terbedded marl, as above	54	518
Sand: fine to coarse-grained, angular, limonitic, sideritic	128	646
Summary:		
Middle and lower Eocene (undifferentiated)	78	78
Paleocene (Clayton formation)		98
Upper Cretaceous (Providence sand)	167	265
In Upper Cretaceous (Ripley formation)		450
No samples		464
	100	

### **Potential Water-Bearing Zones:**

In Upper Cretaceous (Cusseta(?) sand) 182

Sand:	fine t	to	coarse-grained	15	190
Sand:	fine t	to	coarse-grained	5	525
Sand:	fine 1	to	coarse-grained	71	646

### SCHLEY COUNTY

646

	Well No.: GGS Elev.: 527	5 312
Drilled: July 1952		
-	Thickness (feet)	Depth (feet)
Middle and Lower Eocene (Undifferentiated):		
Clay: brick-red, sandy, limonitic		10
Clay: mottled, sandy, somewhat bauxitic(?)	20	30

Sand: fine to coarse-grained; interbedded clay, yellow to light-tan, somewhat sandy 65 35

345

F

Sand: fine to coarse-grained; interbedded clay, gray, car- bonaceous, micaceous	Thickness (feet)	Depth (feet) 120
Clay: yellow, bauxitic(?)		125
Paleocene: Midway Group: Clayton Formation:		
Clay: gray to black, fissile	10	135
Limestone: gray, dense, crystalline (much calcitized), sandy, sandier at depth, fossiliferous (macroshells)	35	170
Upper Cretaceous: Providence Sand:		
Kaolin: white, micaceous, sandy		175
Sand: fine to coarse-grained		210
Kaolin: mottled, sandy		236
Sand: coarse-grained		263

### Summary:

Middle and lower Eocene (undifferentiated)	125	125
Paleocene (Clayton formation)	45	170
Upper Cretaceous (Providence sand)	93	263

## **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	35	210
Sand: coarse-grained	<b>27</b>	263

	SCHLEY COUNTY
Location: 0.3 mi. north of Courthouse in Ellaville, 0.25 mi. west of Highway 19 at public swimming pool Owner: Schley County (Department of Recreation) Driller: Layne-Atlantic Company Drilled: August 1952	Well No.: GGS 315 Elev.: 568
	Thickness Depth (feet) (feet)

## Middle Eocene: Claiborne Group (Undifferentiated):

Clay: yellowish-green to tan to brick-red (mottled), very		
sandy, limonitic	40	40
Sand: medium to coarse-grained, massive, angular	55	95

Lower Eocene and Paleocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: brown to olive-green, fissile, greasy appearance, iron- stained, micaceous, sideritic; blocky clay, black, carbonace- ous, micaceous (finely disseminated)	,51	146
Upper Cretaceous: Providence Sand:		
Sand: coarse-grained, angular, arkosic, limonitic; interbedded clay, dark-green to tan to red (mottled), iron-stained, greasy appearance, micaceous; inclusions of kaolin, white, micaceous Summary:	62	208
	05	05
Middle Eocene (Claiborne group, undifferentiated)		95 146
Upper Cretaceous (Providence sand)		208
Potential Water-Bearing Zones:		
Sand: coarse-grained		156
Sand: coarse-grained		192
Remarks:		

Samples of poor quality.

#### SCREVEN COUNTY

Location: Approximately 100 yd. west of Savannah-At-	Well No.: GGS 295
lanta R.R., east side of Municipal Baseball Park, in	Elev.: 202
Sylvania	
Owner: No. 3 City of Sylvania	
Driller: Stevens and Southern Well Drilling Company	

Drilled: April 1952

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Sand: fine to coarse-grained, subangular, arkosic; with some clay, tan to red (mottled), sandy	10	10
Clay: bluish-gray to tan to red (mottled), sandy, micaceous; sand, fine-grained, with finely disseminated black pebbles of phosphate	10	20
Sand: fine to coarse-grained, subangular, arkosic; some clay, yellowish-green, sandy		125

Well Logs of the Coastal Plain of Georgia	L
	Thickness (feet)
Limestone: light-gray, dense, very sandy, phosphatic, fossil- iferous (macroshells)	
ligocene (Undifferentiated):	

#### Oligocer C

Ç.

Limestone: light-gray to cream at depth, somewhat nodular,		
massive, fossiliferous (fragments and molds of molluscan		
shells, echinoid and bryozoan remains, Ostracods and Fora-		
minifera)	86	220

Quinqueloculina sp., Pyrgo sp., Gypsina globula, Asterocyclina<sup>1</sup> sp. at 135-140.

### Upper Eocene: Jackson Group: Cooper Marl:

Limestone: white, rather soft and chalky, fossiliferous (echi- noid and bryozoan remains and Foraminifera)	38	258
Textularia subhauerii, Textularia hannai, Robulus arcuato- striatus var., Siphonina jacksonensis, Eponides jacksonensis, Nonion planatus, Gypsina globula (common) at 225-230.		
Textularia adalta, Textularia dibollensis var., Planularia cf. P. truncana, Marginulina cocoaensis, Dentalina jackson- ensis, Nodosaria fissicostata, Alabamina mississippiensis, Reussella sculptilis, Angulogerina ocalana, Cassidulina sub- globosa, Cibicides cocoaensis, Cibicides lobatulus, Planulina cocoaensis, and abundant bryozoan remains at 250-255.		
Middle Eocene: Claiborne Group: Lisbon Formation:		

Limestone: light-gray, dense, very sandy, sparsely phosphatic, fossiliferous (macroshells, echinoid and bryozoan remains)	10	268
Sand: fine to medium-grained	22	290
Indurated sand: fine to medium-grained; thin tongues of lime- stone, gray, dense, sandy, sparsely glauconitic	40	330
Sand: fine to medium-grained; thin stringers of marl, gray, somewhat sandy	86	416
Sand: fine to coarse-grained	18	434
Limestone: gray, dense, sandy, glauconitic	28	462
Sand: fine to coarse-grained	13	475
Limestone: gray, dense, sandy, glauconitic	15	490

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

347

Depth (feet)

_		Thickness (feet)	Depth (feet)
Summary:			
Miocene (undifferentiated)		134	134
Oligocene (undifferentiated)			220
Upper Eocene (Cooper marl)			258
Middle Eocene (Lisbon formation)		232	490
Potential Water-Bearing Zones:			
Limestone			258
Sand: fine to coarse-grained			434
Limestone		28	462
	SCR	EVEN CO	UNTY
Location: At Sewage Treatment Plant in Sylvania	Well	No.: GGS	413
Owner: City of Sylvania	Elev	.: 210 <sup>1</sup>	
Driller: Layne-Atlantic Company			
Drilled: February 1955			
		Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):	-		
Sand: fine to medium-grained, arkosic, finely dissem phosphate grains; clay, tan to red (mottled), sandy,			
itie	·	10	10
Clay: bluish-gray to tan to red (mottled), sandy, limon	itic	10	20
Clay: yellowish-green, sandy			40
Clay: as above, but much sandier			78
Sand: fine to coarse-grained; interbedded limestone, gray to white, dense (much calcitized), sandy, phos fossiliferous (macroshells)	phatic,	13	91
Oligocene (Undifferentiated):			
Limestone: light-gray, very dense (much calcitized), m nodular, fossiliferous (some echinoid and bryozoan re and Foraminifera)	emains	5	96
Pyrgo sp., Rotalia mexicana var., Gypsina globula <sup>2</sup>	, Tex-		

tularia sp., Cibicides pseudoungerianus at 91-96.

Limestone: yellow to white at depth, saccharoidal (highly calcitized), crystalline, nodular, fossiliferous (as above) 7 103

 $Dictyoconus^2$  sp. at 96-103.

<sup>&</sup>lt;sup>1</sup>Average elevation based on Georgia State Highway Maps. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	Well	LOGS	OF	THE	COASTAL	Plain	$\mathbf{OF}$	Georgia
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	Thickness (feet)	Depth (feet)
Limestone: cream, nodular (much calcitized), fossiliferous (as above)	65	168
Cancris vicksburgensis, Pullenia alazanensis at 118-128.		
Upper Eocene: Jackson Group: Cooper Marl:		
Limestone: whiter than above, soft, chalky, weathered(?), fos- siliferous (abundant bryozoan remains and Foraminifera)	46	214
Siphonina jacksonensis, Gypsina globula, Eponides jackson- ensis, Lepidocyclina sp. at 168-178.		
Discorbis assulata, Planulina cocoaensis, Cibicides cocoaen- sis, Robulus alato-limbatus, Robulus arcuato-striatus var., Rotalia mexicana var., Pyrgo sp., Quinqueloculina sp., Cibicides lobatulus, Cibicides mississippiensis, Gypsina globula at 198-214.		
Middle Eocene(?): Claiborne Group: Lisbon Formation:		
Sand: fine to coarse-grained, angular, fossiliferous (casts and molds of megafossils)		216
Summary:		
Miocene (undifferentiated)	91	91
Oligocene (undifferentiated)		168
Upper Eocene (Cooper marl)		214
Middle Eocene(?) (Lisbon formation)	2	216
Potential Water-Bearing Zones:		

Sand: fine to coarse-grained	13	91
Limestone	123	214
Sand: fine to coarse-grained	2	216

## SCREVEN COUNTY

Location:	Well No.: GGS 462
Owner: No. 1 Arnett Elementary School Driller: Speedy McQuaig Plumbing Company	Elev.: 216
Drilled: 1955	
	Thickness Depth (feet) (feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, arkosic; clay, bluish-gray to		
tan to red (mottled), very sandy	10	10

Miocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: yellowish-green to purple (mottled), sandy, phosphatic (at depth); interbedded sand, fine to medium-grained, somewhat coarser-grained at depth	150	160
Light-gray phosphatic pebbles prominent at 100-110.		
Yellowish-green chert prominent at 150-160.		
Clay and sand: as above; thin tongues of limestone, white, dense, sandy	60	220
Oligocene (Undifferentiated):		
Limestone: light-gray to pinkish, dense (much calcitized), nodular, sandy, fossiliferous (casts and molds of megafossils chiefly Gastropods, bryozoan remains and Foraminifera)		300
Dictyoconus <sup>1</sup> sp., Rotalia mexicana var., Quinqueloculina sp. at 220-230.		
$Gypsina \ globula^1$ common at 230-240.		
Lepidocyclina mantelli? at 250-260.		

### Summary:

Pliocene to Recent (undifferentiated)	10	10
Miocene (undifferentiated)	<b>210</b>	220
Oligocene (undifferentiated)	80	300

## Potential Water-Bearing Zones:

Limestone	70	290
Sand: fine to coarse-grained	10	300

	SCREVEN COUNTY
Location: 6.5 mi. east of Rockyford, south side of alter- nate Highway 17 Owner: No. 1 Oak Grove Methodist Church Driller: Turner Well Drilling Company Drilled: 1959	Well No.: GGS 578 Elev.: 165
	Thickness Depth (feet) (feet)

## Miocene (Undifferentiated):

Clay: light-gray with red streaks (mottled), pale-yellowish-		
green at depth, very sandy	84	84
Sand: coarse-grained, subrounded, arkosic		125
<sup>3</sup> Reworked(?) fossil of middle Eocene age.		

WELL	Logs	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA
		~ ~		001101114	-		012010211

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	,	Thickness	Depth
Clay: pale-yellowish-green, sandy, light-brown rounded		(feet)	(feet)
phatic pebbles	-	21	146
Sand: coarse-grained, subrounded, jet-black rounded phatic pebbles, fossiliferous (macroshells)	-	31	177
Oligocene (Undifferentiated):			
Limestone: cream with dark-gray to black streaks, nod massive but porous, somewhat cherty, fossiliferous (: ments and molds of megafossils, echinoid and bryozoa mains, Ostracods, and Foraminifera)	frag- n re-	. 18	195
Quinqueloculina sp., Rotalia mexicana var., Asterig subacuta, Lepidocyclina sp. <sup>1</sup> , Operculinoides sp. <sup>1</sup> , and sina globula <sup>1</sup> at 177-188.			
Limestone: cream, rather soft and chalky, fossiliferous ( zoan remains and some Foraminifera)	-	. 12	207
Gypsina globula <sup>1</sup> common at 195-207.			
Summary:			
Miocene (undifferentiated)		177	177
Oligocene (undifferentiated)		. 30	207
Potential Water-Bearing Zones:			
Limestone		30	207
	SCRE	VEN CO	UNTY
Location: 16 mi. north of Sylvania on U.S. Highway 301 Owner: Wade Plantation Driller: Turner Well Drilling Company	Well Elev.:	No.: GGS 95	590
Drilled: 1959		Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):			
Sand: coarse-grained, subangular, arkosic; interbedded dark-brown to mottled to yellowish-green at depth, san	• •	123	123
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: cream, much leached, rather soft and porous siliferous (molluscan shells, echinoid and bryozoan ren and some Foraminifera)	nains,	20	143
Operculinoides floridensis, Asterocyclina nassauensis, docyclina sp. at 123-143.	Lepi-		
<sup>1</sup> Reworked(?) fossil of middle Eccene age			

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

Middle Eocene: Claiborne Group: Lisbon Formation:	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, subangular, sparsely phosphatic, fossiliferous at depth (Foraminifera); some clay, light- gray, somewhat indurated and tough, very sandy, finely glauconitic, micaceous	20	163
Nonion advena abundant, Nonion inexcavatus, Bolivina sp., Cibicides americanus var. antiquus, Cibicides lobatulus at 143-163.		
Clay: light to dark-greenish-gray to brownish-green, very sandy, sparsely phosphatic, micaceous, carbonaceous	10	173
Limestone: light-gray, saccharoidal, dense, sandy, sparsely phosphatic, glauconitic, fossiliferous (molds and impressions of molluscan shells, echinoid and bryozoan remains, and some Foraminifera)	57	230
Spiroplectammina mississippiensis var., Textularia hannai, Nonion advena, Discorbis assulata, Gyroidina soldanii var., Cibicides americanus, Cibicides lobatulus, Cibicides cf. C. refulgens at 191-210.		
Limestone: as above but light-gray to cream at depth	41	271
Marl: cream but rather dark-brownish-green at depth, some- what indurated and tough, sandy, with hard limey nodules, .fossiliferous (echinoid and bryozoan remains, Ostracods, and Foraminifera); interbedded limestone or coquina, white to light-brown, sandy, coarsely but sparsely glaucon- itic, fossiliferous (echinoid and bryozoan remains, and abun- dant fragments and molds of megafossils); beds of sand, fine to coarse-grained, subangular, sparsely phosphatic	103	374
Discorbis georgiana, Gyroidina soldanii var., Alabamina atlantisae, Nonion planatus, Guttulina irregularis, Cibi- cides danvillensis, Cibicides ouachitaensis, Cibicides pseu- doungerianus var., Cibicides westi, Cibicides sp. at 271-292. Cibicides pseudoungerianus var. lisbonensis, Cibicides pip- peni, Cibicides westi at 292-312.		
Coquina prominent at 312-333.		
Summary:		
Miocene (undifferentiated)	123	123
Upper Eocene (Ocala limestone)	20	143
Middle Eocene (Lisbon formation)		374

# Potential Water-Bearing Zones:

Sand: fine-grained	30	173
Limestone	98	271

# SEMINOLE COUNTY

Location: In Donalsonville	Well No.: GGS 149	
Owner: City of Donalsonville	Elev.: 150 <sup>1</sup>	
Drilled: August 1947		
	Thickness (feet)	Depth (feet)
No samples	60	60
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white to cream, much calcitized, crystalline sive, fossiliferous (bryozoan remains and Foraminifer	•	160
Operculinoides sp., Lepidocyclina sp. at 65-77.		
Gypsina globula at 77-90.		
Amphistegina pinarensis var. at 100-112.		
Summary:		
No samples		60
In upper Eocene (Ocala limestone)		160

### **Potential Water-Bearing Zones:**

Limestone	100	160
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### Remarks:

Additional aquifers—water-bearing sands and limestones—occur below total depth of this well.

### SEMINOLE COUNTY

Location: 660 ft. from south line and 660 ft. from east line of Land Lot 82, 27th Land District Owner: No. 1 W. E. Harlow Driller: Mont Warren et al Drilled: February 1949	Well No.: GGS Elev.: 145 (derrick	
	Thickness (feet)	Depth (feet)
<b>Residuum:</b> Clay: bluish-gray to tan (mottled), very sandy, limoniti	c	40
Upper Eocene: Jackson Group: Ocala Limestone:	40	40
Limestone: yellow, much leached, crystalline, highly tized, fossiliferous (casts and molds of megafossils, ech and bryozoan remains, and some Foraminifera)	hinoid	50
<sup>1</sup> Average elevation based on Georgia State Highway Maps.		

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, angular; some limestone, as above		60
Amphistegina pinarensis var., Operculinoides sp., Astero- cyclina sp. at 50-60.		
No samples		663
In Middle Eocene: Claiborne Group: Tallahatta Formation:		
Sand: fine to coarse-grained, subangular, somewhat indurated, glauconitic; fragments of limestone, gray, crystalline, dense, very sandy, coarsely glauconitic, fossiliferous (fragments, casts and molds of megafossils)		720
Lower Eocene: Wilcox Group (Undifferentiated):		
Indurated sand: fine to medium-grained, subangular, coarsely and abundantly glauconitic, fossiliferous (fish teeth)		750
Clay: dark-gray, silty, lignitic, micaceous	160	910
Paleocene: Midway Group: Clayton Formation:		
Limestone: gray, dense, crystalline, very sandy, glauconitic, fossiliferous (fragments and casts of megafossils)		920
Indurated sand: fine-grained, dense, saccharoidal, glauconitic (finely disseminated), fossiliferous (fragments, casts and molds of megafossils, bryozoan remains, Ostracods, and Foraminifera)	60	980
Operculinoides catenula, Rotalia sp. at 960-970.		
Pseudophragmina stephensoni, Rotalia sp., Boldia madru- gensis at 970-980.		
Limestone: cream, granular, coarsely glauconitic at certain levels, cherty, fossiliferous (some Foraminifera)	. 85	1,065
Brown chert prominent at 990-1000.		
Vaginulina longiforma, Boldia madrugensis, Discorbis mid- wayensis var. soldadoensis, Siphonina prima at 1040-1050.		
Indurated sand: dark-gray, fine-grained, argillaceous, glau- conitic (finely disseminated), micaceous; stringers of clay, dark-gray, micaceous, carbonaceous	75	1,140
Indurated sand <sup>1</sup> : as above		1,230
Limestone: gray, granular, rather loosely consolidated, glau- conitic (finely disseminated), fossiliferous (some Foramini-		
fera) Indurated sand grades gradually downward into the underlying granular	170	1,400

<sup>&</sup>lt;sup>1</sup>Indurated sand grades gradually downward into the underlying granular limestone. No sharp contact was observed between these two lithologic units.

	Thickness (feet)	Depth (feet)
Marl: gray, silty, chalky, micaceous, fossiliferous (abundant Foraminifera <sup>2</sup> )	30	1 490
Foramimiera")	30	1,430
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Marl: gray, chalky, micaceous, pyritiferous, fossiliferous (abundant Foraminifera)		1,455
Globotruncana cretacea common at 1430-1440.		
Indurated sand: fine-grained, glauconitic, rather dense, mi- caceous		1,675
Marl: gray, chalky, micaceous, pyritiferous, fossiliferous (at certain horizons, macroshells, Ostracods, and Foraminifera).	805	2,480
Planulina taylorensis at 1720-1730.		
Bolivinoides decorata at 1730-1740.		
Kyphopyxa christneri at 2060-2070.		
Vaginulina texana at 2310-2320.		
Sand: fine to coarse-grained, somewhat indurated, glauconitic (finely disseminated); thin stringers of marl, as above	125	2,605
Sand: indurated, more or less fine to coarse-grained, angular,		
phosphatic, glauconitic (finely disseminated)	145	2,750
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, micaceous, fossiliferous (at certain horizons, macroshells); clay, pale-green, some- what mottled, sandy, micaceous	190	2,940
Sand: fine to medium-grained, angular, micaceous, fossilifer- ous (at certain horizons, macroshells); interbedded shale, dark-gray, fissile, carbonaceous, micaceous (finely dissemi-		
nated flakes)	250	3,190
Indurated sand: fine-grained, abundantly glauconitic (finely disseminated); some shale, as above	78	3,268
Sand: coarse-grained, angular, arkosic; interbedded clay,		
yellowish-green to red (mottled), micaceous, sandy	304	3,572
Summary:		
	40	40
Residuum Upper Eocene (Ocala limestone)		40 60
No samples		663
In middle Eocene (Tallahatta formation)		720
Lower Eocene (Wilcox group, undifferentiated)		910
Paleocene (Clayton formation)	520	1,430
Upper Cretaceous (post-Tuscaloosa, undifferentiated)		2,750
Upper Cretaceous (Tuscaloosa formation)	822	3,572

<sup>2</sup>Tamesi fauna of Paleocene age.

F

Thickness Depth (feet) (feet)

#### **Potential Water-Bearing Zones:**

None observed in samples available on this well.

### **Remarks**:

Water-bearing limestone occurs somewhere in the interval 60-400. Samples were lacking in the interval 60-663, hence the thickness of the Ocala formation in this well is not known on the basis of available samples.

#### STEWART COUNTY

Location: 2.5 mi. north of Lumpkin on Highway 27	Well No.: GGS	451
Owner: No. 1-A Interstate Land Development Company	Elev.: 525	
Driller: Southeastern Drilling Company		
Drilled: October 1955		
	Thickness	Depth

(feet)	(feet)

#### **Upper Cretaceous: Providence Sand:**

Sand: fine to coarse-grained, angular, limonitic; some clay, tan to pink (mottled) to white (kaolin) at depth, micaceous,		
sandy	70	70
Sand: coarse-grained, angular, arkosic	5	75
Ripley Formation:		
Marl: dark-gray, silty, somewhat sandy at depth, micaceous, carbonaceous, phosphatic, glauconitic, fossiliferous at depth (macroshells, Ostracods, and Foraminifera)	255	330
Gaudryina sp., Robulus sp., Anomalina clementiana at 100- 110.		
Loxostoma plaitum, Anomalina pseudopapillosa, Anoma- lina clementiana at 120-130.		
Planulina henbesti at 220-230.		

#### Cusseta and Blufftown (Undifferentiated):

Sand: fine to coarse-grained, angular, micaceous, phosphatic,		
lignitic; interbedded clay, dark bluish-gray to brown, some-		
what fissile, carbonaceous, micaceous, pyritiferous	180	510

#### Summary:

Upper Cretaceous (Providence sand)	75	75
Upper Cretaceous (Ripley formation)	255	330
Upper Cretaceous (Cusseta and Blufftown, undifferentiated)	180	510

WELL LOGS OF THE COASTAL PLAIN OF GE	ORGIA		357
		lickness (feet)	Depth (feet)
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		20	434
	STEWA	ART CO	UNTY
Location: 1.5 mi. east of road junction in Omaha, north side of east-west secondary road Owner: No. 1 Omaha School Driller: Layne-Atlantic Company Drilled: February 1956	Well No Elev.: 3	o.: GGS 318	478
		nickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Clay: bluish-gray to tan to brick-red (mottled), very sa	undy,		
limonitic		11	11
Sand: very coarse-grained (subgravel size), angular, ark	osic	17	28
Upper Cretaceous: Ripley Formation:			
Marl: dark bluish-gray, carbonaceous, micaceous, phospl pyritiferous, fossiliferous (macroshells, Ostracods, Foraminifera); sideritic and glauconitic at depth	and	66	94
Robulus stephensoni at 68-78.			
Glauconite common at 88-94.			
Cusseta Sand:			
Sand: fine to coarse-grained, subangular, fossiliferous ( roshells)		20	114
Blufftown Formation:			
Marl: as above; interbedded at widely separated inte with beds of indurated sand, dark-gray, rather dense crystalline, micaceous, glauconitic (finely disseminated	and	197	311
Vaginulina texana at 188-198. Vaginulina texana, Marginulina sp. at 290-300.			
Summary:			
Pliocene to Recent (undifferentiated)		28	28
Upper Cretaceous (Ripley formation)		66	94
Upper Cretaceous (Cusseta sand)		20	114
Upper Cretaceous (Blufftown formation)		197	311

Potential Water-Bearing Zones:	Thickness (feet)	Depth (feet)	
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Sand: fine to coarse-grained 20 114

# **Remarks:**

The best aquifers (sand) in this area occur much deeper than the total depth of this well. Such aquifers belong to the more deeply buried Eutaw and Tuscaloosa formations.

#### SUMTER COUNTY

<ul> <li>Location: Northeastern part of County, near Flint River, We few hundred yd. south of Creek Branch, east side of Ele north-south County Road</li> <li>Owner: No. 6 USGS Test Hole</li> <li>Driller: Scott Bros.</li> <li>Drilled: August 1946</li> </ul>	ll No.: GG v.: 278	S 137
· · · · · · · · · · · · · · · · · · ·	Thickness (feet)	Depth (feet)
Residuum :		
Clay: mottled, very sandy, limonitic	20	20
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, glauconitic at depth, sandy, fossiliferous (macroshells and Foraminifera at certain levels)		46
Lepidocyclina sp., Gypsina globula at 30-40.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: light-gray, sandy, glauconitic (finely disseminated grains), fossiliferous (macroshells, bryozoan remains, and Foraminifera); interbedded limestone, cream, dense, sandy, glauconitic, fossiliferous (macroshells)		90
Gyroidina soldanii var., Siphonina claibornensis, Cibicides westi at 46-50 core.		
Tallahatta Formation:		
Sand: fine to coarse-grained, angular, phosphatic, fossilifer- ous (a coquina)	100	190
Limestone: gray, dense, sandy, glauconitic, fossiliferous (macroshells)		200

Well Logs of the Coastal Plain of Georgia		359
Lower Eocene: Wilcox Group (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: dark-gray, silty, carbonaceous, glauconitic	60	260
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to medium-grained, angular, somewhat indurated; thin stringers of clay, light-gray, micaceous	30	290
Clay: dark-gray to black, carbonaceous, glauconitic, micaceous (finely disseminated)	20	310
Limestone: gray, dense, crystalline, sandy, fossiliferous (casts and molds of megafossils and occasional bryozoan remains).		360
Upper Cretaceous: Providence and Ripley (Undifferentiated):		
Sand: fine to coarse-grained, angular	20	380
Sand: as above; marl, bluish-gray, silty, micaceous, fossilifer- ous (megafossils and Foraminifera at depth)	70	450
Anomalina pseudopapillosa at 420-430.		

R.

# Summary:

20	<b>20</b>
<b>2</b> 6	<b>46</b>
44	90
110	<b>200</b>
60	260
100	360
90	450
	20 26 44 110 60 100 90

# Potential Water-Bearing Zones:

Sand: fine to medium-grained	30	290
Limestone	50	360
Sand: fine to coarse-grained	20	380

# SUMTER COUNTY

Location: In Americus	Well No.: GGS 147	
Owner: City of Americus	Elev.: 412	
Driller: Layne-Atlantic Company		
Drilled: 1947		
	Thickness (feet)	Depth (feet)

# Middle Eocene: Claiborne Group: Tallahatta Formation:

Clay: mottled, sandy, limonitic; tongues of sand, fine to me-		
dium-grained, angular	37	37
Sand: fine to coarse-grained, angular	52	89

Lower Eocene: Wilcox Group (Undifferentiated):	Thickness (feet)	Depth (feet)
- · · · ·		
Clay: light-gray, silty, micaceous, iron-stained	20	109
Clay: dark-gray to black, silty, micaceous, carbonaceous, glau- conitic		147
Paleocene: Midway Group: Clayton Formation:		
Clay: white to pink (mottled), bauxitic?, micaceous, sandy	19	166
Sand: fine to coarse-grained, subangular	4	170
Limestone: gray, dense, crystalline, sandy, fossiliferous (meg- afossils and some bryozoan remains)	- 40	210
Upper Cretaceous: Providence and Ripley (Undifferentiated):		
Clay: gray, blocky, micaceous	11	221
Sand: fine to coarse-grained, angular		281
Marl: gray, silty, micaceous; some sand, as above	46	327
Limestone: gray, dense, crystalline, very sandy	25	352
Marl: gray, sandy, chalky, micaceous, fossiliferous (some microfossils); interbedded sand, fine to medium-grained, angular		626
Anomalina pseudopapillosa at 352-358.		
Sand: fine to coarse-grained, angular; interbedded clay or shale, dark-brown, fissile, silty, lignitic, highly micaceous		986
Summary:		
Middle Eocene (Tallahatta formation)	89	89
Lower Eocene (Wilcox group, undifferentiated)		147
In Paleocene (Clayton formation)		210 986
Upper Cretaceous (Providence and Ripley, undifferentiated)	776	900
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		169
Limestone		$\frac{210}{281}$
Sand: fine to coarse-grained Sand: fine to coarse-grained		281 726
band. Inte to coalse-glained		, 20

### Remarks:

Owing to ground-water discharge (springs) and local rather rugged topography, all prospective aquifers occurring at depths of less than 200 feet below land surface are possibly dry and not good risks as sources of ground water.

#### SUMTER COUNTY

Location: At Arles Owner: Dayton Veneer and Lumber Company Driller: Layne-Atlantic Company Drilled: 1948	Well No.: GGS 215 Elev.: 463	
Dimer. 1940	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Tallahatta Formation:		
Clay: brick-red, very sandy, limonitic		33
Clay: light-gray to tan to red (mottled), sandy, limonitic		53
Sand: fine to coarse-grained, subangular		135
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, sandy, carbonaceous, micaceous		165
Paleocene: Midway Group: Clayton Formation:		
Clay (or kaolin): white to light-gray, sandy, abundantly s ritic, micaceous, bauxitic?		203
Clay: light to dark-gray, silty, abundantly glauconitic, o bonaceous, micaceous		219
In Upper Cretaceous: Providence and Ripley (Undifferentia	ted):	
Marl: gray, silty, micaceous, glauconitic, fossiliferous at de (Foraminifera); interbedded limestone, gray, dense, c talline, sandy, fossiliferous (macroshells)	rys-	<b>38</b> 6
Limestone prominent at 262-275.		
Limestone prominent at 342-375.		
Anomalina pseudopapillosa at 375-386.		
Summary:		

#### Middle Eocene (Tallahatta formation) 135 135Lower Eocene (Wilcox group, undifferentiated) 30 165 Paleocene (Clayton formation) 54 219 386

#### In Upper Cretaceous (Providence and Ripley, undifferentiated) ..... 167

# **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	55	135
Sand: fine to coarse-grained	58	342

#### SUMTER COUNTY

Location: 1.5 miles northeast of Plains, 4.2 miles west of	Well No.: GGS 280
New Point Flag Station, 0.1 mile south of Highway 280	Elev.: 513
Owner: No. 1 Southwestern Georgia Experiment Station	
Driller: Layne-Atlantic Company	

Drilled: March 1952 Thickness Depth (feet) (feet) No samples 5 5 In Middle Eocene: Claiborne Group: Tallahatta Formation: Clay: mottled, sandy, limonitic 33 38 Sand: fine to coarse-grained, angular 5795 Lower Eocene: Wilcox Group (Undifferentiated): Clay: gray, sandy, carbonaceous, glauconitic at depth 49144 Summary: No samples \_\_\_\_\_ 5 5 In middle Eocene (Tallahatta formation) 95 90 Lower Eocene (Wilcox group, undifferentiated) 49 144 **Potential Water-Bearing Zones:** 

Sand: fine to coarse-grained 57 95

#### SUMTER COUNTY

		ell No.: GGS 281 lev.: 391	
Diffied. March 1992	Ţ	Thickness (feet)	Depth (feet)
No samples		5	5
Middle Eocene: Claiborne Group: Tallahatta Formation:			
Clay: brick-red, sandy, limonitic		7	12
Sand: fine to coarse-grained, subangular; interbedded cl pale-green, somewhat micaceous, sandy	• /	108	120

WELL LOOD OF THE CONDIAL PLANT OF CH	NUIA		000
Lower Eocene: Wilcox Group (Undifferentiated):	1	Thickness (feet)	Depth (feet)
Clay: gray, silty, micaceous, carbonaceous, glauconitic		7	127
		- (	127
Sand: fine to coarse-grained, glauconitic, fossiliferous (a quina but not consolidated)		. 33	160
Paleocene: Midway Group: Clayton Formation:			
Limestone: gray, dense, crystalline, sparsely glauconitic, siliferous (megafossils and some bryozoan remains); so clay, black, fissile, carbonaceous, micaceous (finely seminated)	ome dis-	. 30	190
,			200
Sand: medium-grained, angular; some marl, gray, silty, caceous		17	207
Summary:			
No samples		- 5	5
In middle Eocene (Tallahatta formation)		115	120
Lower Eocene (Wilcox group, undifferentiated)			160
Paleocene (Clayton formation)		_ 47	207
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		. 33	160
Limestone			190
Sand: medium-grained		_ 10	207
	SUN	ATER CO	UNTY
Location: 2 mi. south of Flintside grade crossing of S.A.L. R.R., about 100 yds. west of county road, 40 north of dwelling		l No.: GG .: 322	S 283
Owner: No. 1 Trim Porter			
Driller: F. P. Jones	·		
Drilled: March 1952		Thickness (feet)	Depth (feet)
Residuum:			
Sand: medium to coarse-grained, angular, limonitic			30
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: yellow, much calcitized, somewhat crystal sparsely glauconitic (at depth), fossiliferous (macrosh bryozoan remains, and some Foraminifera)	ells,	100	130
Siphonina jacksonensis at 40-50.			

363

Lepidocyclina sp., Operculinoides sp. at 80-90.

	Summary:	Thickness (feet)	Depth (feet)
In Residuum			30
Upper Eocene	(Ocala limestone)	100	130
Potential Water-Bearing Zones:			
Limestone		90	130

# SUMTER COUNTY

SU		MTER COUNTY	
Owner: City of Plains	Well No.: GG Elev.: 502	ell No.: GGS 291 ev.: 502	
Driller: Layne-Atlantic Company Drilled: March 1952	Thickness (feet)	Depth (feet)	
Middle Eocene: Claiborne Group: Tallahatta Formation:			
Clay: mottled, very sandy, limonitic		30	
Sand: fine to coarse-grained, angular		80	
Clay: olive-green to red (mottled), sandy		90	
Lower Eocene: Wilcox Group (Undifferentiated):			
Clay: dark-gray, silty, glauconitic, carbonaceous, micaceous	s 50	140	
Sand: fine to coarse-grained, subangular, glauconitic		154	
Paleocene: Midway Group: Clayton Formation:			
Clay: black, somewhat fissile, carbonaceous, micaceous		169	
Sand: fine-grained, indurated at certain levels, glauconitic		214	
Clay: gray, carbonaceous, micaceous; interbedded limesto	ne,		

gray, crystalline, glauconitic, fossiliferous (macroshells and		
some bryozoan remains)	28	242
Limestone: as above	21	263

### Summary:

Middle Eocene (Tallahatta formation)	90	90
Lower Eocene (Wilcox group, undifferentiated)	<b>64</b>	154
Paleocene (Clayton formation)	109	263

Potential Water-Bearing Zones:	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained	14	154
Sand: fine to coarse-grained	45	214
Limestone	21	263

### **Remarks:**

More productive aquifers (of Upper Cretaceous age) are available below 263.

	SUMTER CO	UNTY
Location: ½ mi. northeast of Shiloh School, at dwelling Owner: No. 1 Smith Moore Driller: Southeastern Drilling Company Drilled: 1952	Well No.: GG Elev.: 509	S 296
Drined: 1992	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Tallahatta Formation:		
Sand: fine to coarse-grained, angular; interbedded clay, p green to tan to red (mottled), micaceous, limonitic		140
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, micaceous, abundantly glauconiti	<b>c</b> 14	154
Summary:		
Middle Eocene (Tallahatta formation)		140
Lower Eocene (Wilcox group, undifferentiated)		154
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	40	140
	SUMTER CO	OUNTY
Location: At Spring Creek, near swimming pool, at first road south of grocery Owner: No. 1 C. E. Pelcher Driller: F. P. Jones Driller: Jose	Well No.: GC Elev.: 247	IS 303
Drilled: May 1952	Thickness (feet)	Depth (feet)

# **Residuum:**

Clay: dark-brown, sandy, lignitic, and fragments of residua	1	
limestone		30

	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Sand: fine to coarse-grained, somewhat indurated, glaucon at depth, fossiliferous (macroshells)		70
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: gray, glauconitic, fossiliferous (macroshells, bryoz remains, and Foraminifera); some sand, as above		90
Asterigerina sp., Cibicides westi at 80-90.		
Limestone: gray, coarsely glauconitic, sandy; some marl, above	,	110
Tallahatta Formation:		
Sand: fine to medium-grained, fossiliferous (macroshells)		140
Summary:		
Residuum		30
Upper Eocene (Ocala limestone)		70
Middle Eocene (Lisbon formation)		110
Middle Eocene (Tallahatta formation)		140
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		140
	SUMTER CO	UNTY
Location: Near intersection of Virginia and Harold Sts., opposite City High School, east side of Harold St., in Americus Owner: City of Americus Driller: Layne-Atlantic Company	Well No.: GG Elev.: 380	S 333
Drilled: January 1953		
	Thickness (feet)	Depth (feet)

Middle Eocene: Claiborne Group: Tallahatta Formation:		
Clay: mottled, sandy, limonitic	30	30
Sand: fine to coarse-grained, subangular, limonitic	32	62
Lower Eccene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, carbonaceous, micaceous	34	96

	Thickness (feet)	Depth (feet)
Clay: dark-gray, silty, micaceous, abundantly glauconitic, fos- siliferous (some Foraminifera)	12	108
Robulus sp., Valvulineria scrobiculata, Eponides dorfi at 96-108.		
Sand: fine to coarse-grained, subangular, arkosic; relatively thin stringers of clay (or fuller's earth), light-gray, silty, blocky, carbonaceous, micaceous	6 <b>2</b>	170
Paleocene: Midway Group: Clayton Formation:		
Clay (or fuller's earth): as above; some fissile clay, black, carbonaceous, micaceous, fossiliferous (some Foraminifera).		196
Ammobaculites sp., Nodosaria affinis, Robulus sp., Epon- ides lotus, Discorbis midwayensis, Cibicides newmanae, Ci- bicides howelli at 190-198.		
Limestone: light-gray, dense, crystalline, sandy, glauconitic at depth, fossiliferous (casts and molds of megafossils, bryo- zoan remains, and Foraminifera)	18	214
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Clay or kaolin: light-gray, somewhat waxy, blocky	4	218
Sand: fine to coarse-grained, angular, grains of "rose quartz".	14	232
Marl: dark bluish-gray, chalky, silty, micaceous, fossiliferous (some macro- and microfossils at certain levels); inter- bedded sand, fine to medium-grained	58	290
Epistomina caracolla at 238-280.		
Limestone: gray, dense, crystalline, sandy	14	304
Marl: as above, sandier with depth		322
Sand: fine to coarse-grained, angular; interbedded marl, as above		349
Marl: as above		382
Sand: fine to coarse-grained, angular; interbedded marl, as above		426
Marl: as above; interbedded sand, fine to medium-grained, angular		462
Sand: fine to coarse-grained, angular		470
Sand: fine to medium-grained, angular; interbedded marl, as above		540
Sand: fine to coarse-grained, angular		560
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	Thickness (feet)	Depth (feet)
Marl or shale: dark-brown, somewhat fissile, silty, carbona- ceous, highly micaceous	19	579
Sand: fine to coarse-grained, angular; interbedded marl, dark-brown, fissile, carbonaceous, silty, highly micaceous	405	984
Summary:		
Middle Eocene (Tallahatta formation)	62	62
Lower Eccene (Wilcox group, undifferentiated)	108	170
Paleocene (Clayton formation)	44	214
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	770	984

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	8	170
Sand: fine to coarse-grained	14	232
Sand: fine to coarse-grained	10	332
Sand: fine to coarse-grained	9	349
Sand: fine to coarse-grained	12	394
Sand: fine to coarse-grained	10	408
Sand: fine to coarse-grained	8	470
Sand: fine to coarse-grained	15	604
Sand: fine to coarse-grained	6	630
Sand: fine to coarse-grained	8	692
Sand: fine to coarse-grained	26	754
Sand: fine to coarse-grained	42	800
Sand: fine to coarse-grained	<b>24</b>	914

#### **Remarks:**

Owing to local rugged topography, all relatively shallow-lying aquifers are probably dry through ground-water leakage (i.e. spring discharge) and are doubtful sources of ground water.

	SUMTER COU	NTY
Location: In Andersonville	Well No.: GGS	342
Owner: No. 1 City of Andersonville	Elev.: 412	
Driller: Layne-Atlantic Company		
Drilled: April 1953		
	Thickness (feet)	Depth (feet)

### Middle Eocene: Claiborne Group: Tallahatta Formation:

Clay: mottled, sandy, limonitic	23	23
Sand: fine to medium-grained, angular	60	83
Sand: coarse-grained, angular	5	88

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		369
Lower Eocene and Paleocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: tan, sandy, micaceous	5	93
Clay: gray, silty, micaceous, lignitic; some clay, bauxitic?, white to pink (mottled), micaceous	10	103
Clay: gray, sandy, micaceous, lignitic	10	113
Clay: white to pink (mottled), bauxitic?, micaceous		133
Clay: dark-gray to black, glauconitic, micaceous		136
Clay: light-gray, micaceous		141
Limestone: gray, dense, crystalline, glauconitic, fossiliferous (megafossils and bryozoan remains)	41	182
Upper Cretaceous: Providence Sand:		
Clay: red, micaceous, sideritic	13	195
Sand: coarse-grained, angular, many grains of "rose quartz"		216
Summary:		
Middle Eocene (Tallahatta formation)		88
Lower Eocene and Paleocene (undifferentiated)		182
Upper Cretaceous (Providence sand)	. 34	216
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		216

	SUMTER CO	UNTY
Location: Near Americus Owner: No. 1 International Minerals Corp. Driller: Southeastern Drilling Company	Well No.: GG	S 440
	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Tallahatta Formatic Clay: olive-green to tan to red (mottled), very sand		10
Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: fine to medium-grained, subangular, glaucon		

	Thickness (feet)	Depth (feet)
Clay: dark-gray, micaceous, glauconitic, fossiliferous at depth (some Foraminifera)	10	50
Robulus wilcoxensis, Valvulineria scrobiculata, Cibicides howelli, Cibicides newmanae at 40-50.		
Paleocene: Midway Group: Clayton Formation:		
Clay: white, micaceous, bauxitic?, sandy		60
Sand: fine to medium-grained, subangular; some clay, as above	10	70
Clay: black, fissile, glauconitic, fossiliferous; limestone, gray, nodular, dense (calcitized), fossiliferous (bryozoan remains, molds and fragments of macroshells, and Foraminifera); sand and kaolin as above	10	80
Eponides dorfi, Discorbis midwayensis var. trinitatensis, Siphonina wilcoxensis, Alabamina wilcoxensis, Cibicides howelli, Cibicides praecursorius at 70-80.		
Limestone: light-gray, calcitized, nodular, sandy, glauconitic at depth, fossiliferous (molds and fragments of macroshells, bryozoan remains, Ostracods and Foraminifera)	35	115
Marl: bluish to light-gray, silty, micaceous, fossiliferous	15	130
Siphonina prima, Cibicides howelli, Anomalina umbonifera at 120-130.		
Limestone: gray, dense (calcitized), coarsely glauconitic and sandy at depth, fossiliferous	30	160
Eponides lotus, Discorbis midwayensis, Siphonina wilcox- ensis, Siphonina prima, Gyroidina aequilateralis, Planulina nacatochensis, Cibicides praecursorius at 130-140.		
Limestone: as above; fragments of marl, gray, silty, micaceous	<b>10</b>	170
Upper Cretaceous: Providence and Ripley (Undifferentiated):		
Sand: fine to coarse-grained, angular	30	200
Marl: light-gray, silty, glauconitic, micaceous, lignitic, pyriti- ferous, fossiliferous (macroshells, Ostracods and Foramini- fera); some sand, as above but decreasing with depth	40	240
$Epistomina\ caracolla, Anomalina\ pseudopapillosa\ at\ 210-220.$		

# Summary:

Middle Eocene (Tallahatta formation)	10	10
Lower Eocene (Wilcox group, undifferentiated)	40	50
Paleocene (Clayton formation)	120	170
Upper Cretaceous (Providence and Ripley, undifferentiated)	70	240

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone		110
Limestone		160
Sand: fine to coarse-grained	30	200
S	SUMTER CO	UNTY
<b>—</b>	Vell No.: GG Clev.: 431	S 442
Drmed: June 1955	Thickness (feet)	Depth (feet)
Middle Eocene: Claiborne Group: Tallahatta Formation:		
Clay: brick-red, very sandy, limonitic	20	20
Sand: medium to coarse-grained, angular		50
Sand: as above; some clay, tan to red (mottled), sandy		75
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: gray, sandy, micaceous, glauconitic, lignitic, pyritifere	ous 25	100
Sand: fine to medium-grained, angular, glauconitic; son clay, as above		155
Glauconite abundant at 140-150.		
Paleocene: Midway Group: Clayton Formation:		
Clay: black, fissile, carbonaceous, micaceous (finely dissem nated)		170
Limestone: gray, dense, crystalline, sandy, fossiliferous (frag ments, casts and molds of megafossils, and some bryozoa	n	0.0F
remains)	95	265
Sand: fine to coarse-grained, angular	10	275
In Upper Cretaceous: Providence and Ripley (Undifferentiated	):	
Sand: fine to coarse-grained, angular	25	300
Marl: dark bluish-gray, silty, micaceous, pyritiferous, fossi iferous (some Foraminifera)		350
Epistomina sp., Anomalina pseudopapillosa at 300-310.		

	Thickness (feet)	Depth (fe <b>et</b> )
Indurated sand: fine to medium-grained, angular, fossilifer- ous (a coquina)		375
Sand: fine to medium-grained, angular; interbedded marl, as above	285	660
Robulus sp. common at 430-440.		
Gaudryina rudita, Cibicides harperi at 440-450.		
Loxostoma plaitum at 490-500.		
Marl: as above; interbedded sand, fine to coarse-grained, angular	240	900
In Cusseta, Blufftown, and Eutaw (Undifferentiated):		
Clay or shale: brown, somewhat fissile, carbonaceous, highly micaceous, silty; interbedded sand, fine to coarse-grained, indurated locally	735	1,635
In Tuscaloosa Formation:		
Sand: coarse-grained, angular, arkosic; interbedded clay, pale-green to red (mottled), micaceous, sandy	205	1,840
Sand: coarse-grained, angular, arkosic; interbedded clay, pale-green to red (mottled), sandy, micaceous	230	2,070
Sand: fine-grained, lignitic, micaceous	70	2,140
Clay: mottled, waxy, sandy, micaceous, sideritic	70	2,210
Sand: coarse-grained, angular, arkosic	220	2,430

# Summary:

Middle Eocene (Tallahatta formation)	75	75
Lower Eocene (Wilcox group, undifferentiated)	80	155
Paleocene (Clayton formation)	120	275
In Upper Cretaceous (Providence and Ripley, undifferentiated)	625	900
In Upper Cretaceous (Cusseta, Blufftown, and Eutaw, undiffer-		
entiated)	735	1,635
In Upper Cretaceous (Tuscaloosa formation)		2,430

# Potential Water-Bearing Zones:

Sand: fine to medium-grained	50	150
Limestone	95	265
Sand: fine to coarse-grained	35	300

#### **Remarks:**

Additional water-bearing sands occur below a depth of 300 feet, but will have to be determined by more exact means than can be done on the basis of cuttings on which the above log is based. The electric log of this well would furnish such exacting information, but, so far, this log has not yet been released for this well.

$\mathbf{S}$	UMTER	COUNTY

Location: Americus Owner: No. 1 Sweet Potato House Driller: Southeastern Drilling Company Drilled: 1956		
Drined: 1990	Thickness (feet)	Depth (feet)
Residuum:		
Sand: fine-grained, argillaceous, limonitic		10
Clay: pale-green to red (mottled), sandy		20
Sand: fine to coarse-grained, angular		30
Middle Eocene: Claiborne Group: Tallahatta Formation:		
Clay: pale-green to red (mottled), sandy, blocky		40
Sand: coarse-grained, angular		50
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: olive-green to tan to red (mottled), very sandy, gla conitic		60
Clay: bluish-gray, fissile, sandy, glauconitic		100
Glauconite very abundant at 90-100.		
Paleocene: Midway Group: Clayton Formation:		
Sand: coarse-grained; some clay, as above		150
Clay: light to dark-gray to black, somewhat blocky; sand,		
above		160
Sand: coarse-grained, subangular		170
Clay: black, fissile, finely micaceous; some sand as above		180
Limestone: gray, dense (much calcitized), somewhat san glauconitic, fossiliferous (fragments and molds of mac shells, bryozoan remains, Ostracods, and Foraminifera)	ro-	210
Robulus degolyeri, Robulus midwayensis, Siphonina wilc ensis, Eponides lotus, Discorbis midwayensis var. trini tensis, Anomalina umbonifera, Cibicides howelli, Cibici praecursorius at 180-190.	ta-	

	Thickness (feet)	Depth (fe <b>et)</b>
Sand: coarse-grained to finer-grained at depth, angular, ar- kosic	20	230
Upper Cretaceous: Providence and Ripley (Undifferentiated):		
Sand: fine-grained	10	240
Sand: as above; clay, light-gray, silty, micaceous, more py- ritiferous and fossiliferous at depth	50	290
Anomalina pseudopapillosa at 280-290.		
Sand: gray, medium-grained, indurated, fossiliferous (frag- ments and molds of macroshells)	50	340
Marl: dark-gray, silty, micaceous, fossiliferous	70	410
Epistomina caracolla, Planulina correcta, Planulina nacatochensis at 340-350.		

#### Summary:

Residuum	30	30
Middle Eocene (Tallahatta formation)	20	50
Lower Eocene (Wilcox group, undifferentiated)	50	100
Paleocene (Clayton formation)	130	230
Upper Cretaceous (Providence and Ripley, undifferentiated)	180	410

# **Potential Water-Bearing Zones:**

Sand: coarse-grained	10	50
Sand: fine to coarse-grained	50	150
Limestone	30	210
Sand: fine to coarse-grained	20	230

	TALBOT COUNTY
Location: Near Geneva	Well No.: GGS 403
Owner: No. 1 Geneva School	Elev.: 575
Driller: Layne-Atlantic Company	
Drilled: September 1954	
-	Thickness Depth (feet) (feet)

### Upper Cretaceous: Tuscaloosa Formation:

Sand: yellow to light-tan, somewhat argillaceous, fine to coarse-grained, angular	5	5
Clay (or kaolin): white to gray to red (mottled), very sandy, arkosic	13	18

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, somewhat argillaceous, arkosic	15	33
Clay (or kaolin) : white to gray to red (mottled), sandy	11	44
Clay: tan to olive-green to red (somewhat mottled), mica- ceous, sandy, arkosic	54	98
Sand: medium to coarse-grained, angular, arkosic	38	136
Clay: brick-red, very sandy, micaceous	10	146
Sand: medium to coarse-grained, angular, arkosic	11	157
Sand: as above but somewhat argillaceous		176

### Summary:

Upper Cretaceous	(Tuscaloosa	formation	)	176	176
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# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	15	33
Sand: medium to coarse-grained	38	136
Sand: medium to coarse-grained	11	157

### TATTNALL COUNTY

· · · · · · · · · · · · · · · · · · ·	ll No.: GGS v.: 187	180
Drined: 1949	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, arkosic, finely disseminat phosphatic grains; some gray clay and white kaolin		30
Miocene (Undifferentiated):		
Clay: pale-green, sandy; interbedded sand, fine to coars grained, arkosic, phosphatic at depth		100
Gray phosphatic pebbles prominent at 90-100.		
Clay: gray to pale-green, sandy, phosphatic		140
Sand: fine to coarse-grained, phosphatic		180
Clay: pale-green, sandy, phosphatic		200

	Thickness (feet)	Depth (feet)
Clay: as above; interbedded limestone, white, rather dense		
(much calcitized), sandy, phosphatic; sand, fine to coarse- grained, phosphatic	210	410
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; sand, as above		460
Macroshells prominent at 430-440.		
Indurated sand: fine to medium-grained, coarsely phosphatic	10	470
Limestone: white, dense (much calcitized), very sandy, phos- phatic	10	480
-		
Oligocene (Undifferentiated):		
Limestone: cream, fossiliferous (bryozoan remains and Fora- minifera)	20	500
Dictyoconus <sup>1</sup> sp., Asterocyclina <sup>1</sup> sp., Asterigerina cf. A. subacuta, Spiroloculina sp., Discorbis byramensis, Gypsina globula <sup>1</sup> , Reusella oligocenica, Operculinoides <sup>1</sup> sp. at 480- 490.		
Lepidocyclina sp., Siphonina advena, Asterocyclina cf. A. nassauensis $^1$ at 490-500.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: as above; fragments of limestone, light gray, crys- talline (much calcitized), fossiliferous (common to abun- dant bryozoan remains and Foraminifera)	20	520
Operculinoides sp., Gypsina globula at 500-510. Asterocyclina sp. at 510-520.		
Limestone: light-gray, crystalline (much calcitized), fossil- iferous (abundant bryozoan remains and Foraminifera)	300	820
Asterocyclina nassauensis, Pseudophragmina flintensis, Gypsina globula at 540-550.		
Summary:		
Pliocene to Recent (undifferentiated)	30	30
Miocene (undifferentiated)	450	480
Oligocene (undifferentiated)		500

### **Potential Water-Bearing Zones:**

Upper Eocene (Ocala limestone)

820

320

Sand: fine to coarse-grained	40	180
Limestone	320	820

#### **Remarks**:

Samples of poor quality.

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

# TATTNALL COUNTY

Owner: Reidsville Prison E Driller: Layne-Atlantic Company	Vell No.: GGS 5 Elev.: 187	522
Drilled: 1956	Thickness (feet)	Depth (feet)
No samples		190
In Miocene (Undifferentiated):		
Clay: yellowish-green, sandy, phosphatic; interbedded s fine to coarse-grained, phosphatic		270
Clay and sand: as above; interbedded limestone, white, s	andy 70	340
Limestone: white, dense (much calcitized), sandy		390
Clay: yellowish-green to pink (mottled), sandy		455
Dolomitic limestone: light-brown, saccharoidal, sandy, phatic, fossiliferous (casts and impressions of megaformed)	phos-	495
Limestone: gray, extremely dense (much calcitized), sa coarsely phosphatic, fossiliferous (casts and impres of megafossils)	sions	508
Oligocene (Undifferentiated):		
Limestone: pinkish-brown, massive (much calcitized), n lar, somewhat oolitic, fossiliferous (Foraminifera)		525
Cibicides americanus at 505-515.		
Pyrgo sp., Asterigerina subacuta, Rotalia byramensis Quinqueloculina sp. at 515-525.	var.,	
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, crystalline (much calcitized), for ferous (bryozoan remains and Foraminifera)		678
Operculinoides sp. at 525-538.		
Asterocyclina sp., Gypsina globula at 538-548. Asterocyclina nassauensis, Pseudophragmina flintens 578-588.	ris at	
Summary:		
No samples		19
In Miocene (undifferentiated)		50
Oligocene (undifferentiated)		52
Upper Eocene (Ocala limestone)	153	678

# **Potential Water-Bearing Zones:**

Limestone	153	678
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#### TATTNALL COUNTY

Location: Few miles south of Cobbtown Well No.: GGS 583 Owner: No. 1 Troy Jarriel Operator: Turner Well Drilling Company Date: September 1959 Thickness Depth (feet) (feet)

#### Miocene (Undifferentiated):

Clay: pale-yellowish-green with tan to red to purple (mot- tled) streaks, sandy, limonitic	42	42
Sand (or very sandy clay): fine-grained, subangular, finely disseminated very small jet-black grains	21	63
Clay: yellowish-green, blocky, very sandy, cherty at depth	121	184
Clay: as above; interbedded with some few beds of limestone, white to cream, sandy, jet-black phosphatic pebbles at depth	102	286
Sand: fine-grained, subangular grains, phosphatic, as in in- terval 42-63	21	307
Greenish-brown chert prominent at 286-307.		
Indurated sand (or coquina): fine-grained, subangular, phos- phatic, fossiliferous (macroshells); interbedded clay, yel- lowish-green, rather tough, partially indurated, sandy	205	512
First observed macroshells at 307-327.		
Indurated sand and clay: as above; interbedded limestone, cream, very sandy, phosphatic, fossiliferous (macroshells)	61	573
Limestone: light-brown, somewhat dolomitic(?), saccha- roidal, very sandy, phosphatic	61	634
Oligocene (Undifferentiated):		
Limestone: light-gray to cream (latter at depth), much leached (weathered?), nodular (when fresh and unweath- ered), rather soft, loosely consolidated, sandy, fossiliferous		
(some echinoid and bryozoan remains and Foraminifera)	41	675

Rotalia mexicana var., Gypsina globula<sup>1</sup> at 634-655.

#### Summary:

Miocene (undifferentiated)	634	634
Oligocene (undifferentiated)	41	675

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

Thickness Depth (feet) (feet)

#### **Potential Water-Bearing Zones:**

None observed to total depth (675).

#### Remarks:

This well represents the thickest section of deposits of Miocene so far observed by the writer. It seems probable, therefore, that this well might have penetrated water-bearing limestones by going deeper (possibly 100 to 150 feet deeper than 675 feet).

#### TAYLOR COUNTY

Location: 1 mi. south of Rupert on Highway 19 Owner: No. 2 Jule Cooper	Well No.: GG	S 428
Driller: R. G. Duke		
Drilled: November 1954	Thickness (feet)	Depth (feet)
No samples	60	60
In Upper Cretaceous (Undifferentiated):		
Sand: fine to medium-grained, angular, arkosic, limonitic		80
Sand: fine to coarse-grained, angular, limonitic; inclusion	s of	
kaolin, white, micaceous		160
Sand: fine to coarse-grained, angular, arkosic		180
Summary:		
No samples		60
In Upper Cretaceous (undifferentiated)	120	180
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		180
	TAYLOR CO	UNTY
Location: 1 mi. south of Mauk on State Highway 127, at private dwelling	Well No.: GG	S 492
Owner: No. 1 B. S. Parker		
Driller: R. G. Duke		
Drilled: May 1956		
No samples	40	40
In Upper Cretaceous (Undifferentiated):		
Sand: fine to medium-grained, angular, arkosic; some ka	•	50
white to pink (somewhat mottled), micaceous		50

	Thickness (feet)	Depth (feet)
Kaolin: white, micaceous, sandy at depth		100
Clay: reddish-brown, very sandy, micaceous	10	110
Sand: fine to coarse-grained, angular, arkosic		160
Clay: gray to pink (somewhat mottled), micaceous, sandy	10	170
Sand: fine to medium-grained, angular, arkosic		200

#### Summary:

No samples	40	40
In Upper Cretaceous (undifferentiated)	160	200

#### **Potential Water-Bearing Zones:**

Sand: fine to medium-grained	1	<b>30</b>	200
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#### **Remarks**:

Additional aquifers can be penetrated in the Tuscaloosa formation beneath the bottom of this well.

### TAYLOR COUNTY

Location: 3.5 to 4 mi. north of Mauk on Atlantic Coast Well No.: GGS 499 Line R.R. in Norwich Owner: No. 1 W. R. Turner Driller: R. G. Duke Drilled: December 1955 Thickness Depth (feet) (feet)

	(1661)	(1000)
No samples	40	40
In Upper Cretaceous (Undifferentiated):		
Sand: medium-grained, angular, some kaolin, white, micaceous.	10	50
Sand: fine to medium-grained, angular, arkosic	70	120
Sand: medium to coarse-grained, angular, arkosic	10	130

#### Summary:

No samples	40	40
In Upper Cretaceous (undifferentiated)	90	130

#### **Potential Water-Bearing Zones:**

Sand:	medium	to	coarse-grained		10	130
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TAYLOR COUNTY

Location: 5 mi. south of Butler Owner: No. 1 F. B. Green Driller: R. G. Duke	Well No.: GO	GS 533
Drilled: 1955		
·	Thickness (feet)	Depth (feet)
No samples	40	40
In Upper Cretaceous (Undifferentiated):		
Sand: fine to coarse-grained, angular, arkosic; interbed kaolin		150
Sand, fine to coarse-grained with some kaolin, white pink, micaceous, at 60-70.	, to	
Sand with kaolin as above at 100-110.		
Summary:		
No samples		40
In Upper Cretaceous (undifferentiated)	110	150
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		150
	TELFAIR C	OUNTY
Location: 588 ft. from southwest line, 410 ft. from south- east line of Land Lot 260, 7th Land District Owner: No. 1 Henry Spurlin Driller: Parsons and Hoke Drilled: September 1953	Well No.: G Elev.: 242 (derrick floo	
	Thicknes (feet)	s Depth (feet)
No samples		30
In Miocene (Undifferentiated):		
Sand: fine to coarse-grained, subangular; interbedded pale-green, sandy		225

Oligocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: white to light-gray, cream at depth, much calci- tized, somewhat saccharoidal, nodular, fossiliferous (echi- noid and bryozoan remains and some Foraminifera)	90	315
Quinqueloculina sp., Pyrgo sp., Rotalia mexicana var. at 225-240. Dictyoconus <sup>1</sup> sp., Lepidocyclina <sup>1</sup> sp. at 300-330.		
Dictyoconus Sp., Deplaceycina Sp. at 500-550.		
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, much calcitized, crystalline, fossili- ferous (echinoid and bryozoan remains and Foraminifera)	75	390
<i>Operculinoides</i> sp. common at 330-360. <i>Asterocyclina</i> sp. common at 360-390.		
No samples	90	480
Limestone: cream, rather soft, chalky, somewhat granular, fossiliferous (echinoid and bryozoan remains and Fora- minifera)	30	510
Operculina mariannensis at 480-510.		
No samples	300	810
In Middle Eocene: Claiborne Group (Undifferentiated):	•	
Limestone: white, somewhat soft and chalky, fossiliferous (Foraminifera)	60	870
Lepidocyclina sp. at 810-870.		
No samples		1,344
In Lower Eocene and Paleocene (Undifferentiated):		
Sand: medium to coarse-grained, subangular, somewhat in- durated, phosphatic; some clay, dark-bluish-gray to black, laminated; considerable limestone, brownish-gray, rather dense, crystalline, coarsely glauconitic, fossiliferous (macro-		
shells)	48	1,392
No samples		1,480
Sand: fine-grained to coarse-grained at depth, subangular, phosphatic; interbedded thin clay, light to dark-greenish- gray to reddish-brown, laminated, silty, micaceous, lignitic.	90	1,570
Reworked(?) fossil of middle Eocene age.		

382

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, subangular; some limestone, brownish-gray, rather massive, sandy, glauconitic, fossili- ferous (some macroshells)		1,600
Sand: fine to coarse-grained, subangular; some clay, as above; some limestone, brownish-gray, rather dense, crys- talline, sandy, fossiliferous (casts and impressions of mega- fossils)	_ 180	1,780
Robulus cf. R. midwayensis, Nodosaria affinis, Eponides lotus?, Valvulineria scrobiculata at 1750-1780.		
Sand and clay: as above but with more sand, glauconite common	n 30	1,810
No samples	180	1,990
In Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Sand: fine to coarse-grained, subangular, glauconitic; some marl, dark-bluish-gray, chalky, micaceous, pyritiferous, fos- siliferous (some Foraminifera)	90	2,080
Globotruncana sp., Cibicides harperi, Anomalina pseudo- papillosa at 1990-2020.		
No samples	100	2,180
Sand and clay: as above	150	2,330
Sand: fine to coarse-grained, subangular; interbedded clay, dark-brownish-gray, laminated, silty, very micaceous, lig- nitic		2,900
In Tuscaloosa Formation:		
Sand: coarse-grained, subangular, arkosic, pink-colored grains of quartz; interbedded clay, greenish-gray, laminated, mi- caceous, carbonaceous	520	3,420
Clay: brick-red, sandy, micaceous, greasy; interbedded sand, fine to coarse-grained, subangular, arkosic	80	3,500
Sand: medium to coarse-grained, subangular, arkosic; inter- bedded clay, brick-red, micaceous, sandy		3,590

# Lower Cretaceous(?) (Undifferentiated):

Sand: coarse-grained, subangular, arkosic, grains of pink		
quartz; interbedded clay, dark-green with tan streaks to		
brick-red, greasy, micaceous, sandy; indurated sand, dark-		
red, fine-grained, sideritic	410	4,000

	Thickness (feet)	Depth (feet)
Summary:		
No samples		30
In Miocene (undifferentiated)	_ 195	225
Oligocene (undifferentiated)	. 90	315
In upper Eocene (Ocala limestone)	195	510
No samples	300	810
In middle Eocene (Claiborne group, undifferentiated)	- 60	870
No samples	474	1,344
In lower Eocene and Paleocene (undifferentiated)	466	1,810
No samples	180	1,990
In Upper Cretaceous (post-Tuscaloosa, undifferentiated)	. 910	2,900
In Upper Cretaceous (Tuscaloosa formation)		3,590
Lower Cretaceous(?) (undifferentiated)	410	4,000

### **Potential Water-Bearing Zones:**

Limestone	645	870
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### Remarks:

Top of Upper Cretaceous, as based on electric log, probably at approximate depth of 1870.

### TELFAIR COUNTY

Location: In McRae	Well No.: GGS 507
Owner: City of McRae	Elev.: 250
Driller: M. M. Gray	Thickness Depth (feet) (feet)

#### Miocene (Undifferentiated):

Sand: fine to coarse-grained, somewhat argillaceous, light- gray to red (mottled), limonitic, arkosic	20	20
Clay: pale-green, sandy; some sand, as above	20	40
Sand: fine to medium-grained, arkosic, finely disseminated phosphatic nodules	20	60
Sand: as above; interbedded clay, pale-green, sandy; thin limestones, white, sandy, sparsely but finely phosphatic	90	150
Limestone: white, dense (much calcitized), sandy, phosphatic, fossiliferous (macroshells and some Foraminifera)	20	170
Elphidium sp., Sorites sp. at 170-175.		

WELL LOGS OF THE COASTAL PLAIN OF GEOF	GIA	385
	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: light-gray to white at depth, nodular, highly c citized, crystalline, sandy, fossiliferous (some echinoid a bryozoan remains and Foraminifera)	nd	230
Rotalia mexicana var., Gypsina globula <sup>1</sup> at 170-180. Lepidocyclina sp. at 210-220.		
Limestone: as above but much softer, massive, fossilifero (echinoid and bryozoan remains, and Foraminifera)		260
Lepidocyclina sp., Coskinolina? <sup>1</sup> sp., Dictyoconus <sup>1</sup> sp. 230-240.	at	
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream, much calcitized, crystalline, fossilifero at certain levels (bryozoan remains and Foraminifera)		375
Operculinoides floridensis common at 260-270.		
Limestone: white, dense (highly calcitized), massive, re tively unfossiliferous		515
Summary:		
Miocene (undifferentiated)		170
Oligocene (undifferentiated)		260
Upper Eocene (Ocala limestone)	255	515
Potential Water-Bearing Zones:		
Limestone		515
r	ERRELL CO	UNTY
11 0	Tell No.: GGS lev.: 347	5 213
	Thickness (feet)	Depth (feet)
Residuum:		
Sand: fine to coarse-grained, angular; clay, yellow to oliv green to red (mottled), sandy, limonitic; residual lin stone, yellow, iron-stained, leached, cherty, fossilifero (bryozoan remains, occasional Ostracods and Foraminife	ie- us	20
Rotalia byramensis var., Quinqueloculina sp. at 0-15.		
<sup>1</sup> Reworked(?) fossil of middle Eocene age.		

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained; fragments of residual lime- stone, as above		62
Middle Eocene: Claiborne Group: Lisbon Formation:		
Sand: fine to coarse-grained, some indurated, fossiliferous at depth (macroshells); interbedded marl, yellowish-green, somewhat indurated, sandy, micaceous, fossiliferous (some Foraminifera)	53	115
Cibicides westi at 62-77. Asterigerina lisbonensis at 77-92. Abundant macroshells at 92-107.		
Tallahatta Formation:		
Sand: fine to coarse-grained, sparsely phosphatic Cibicides tallahattensis at 128-143.		174
Sand: fine to coarse-grained, fossiliferous (abundant macro- shells); some clay, gray, fissile, micaceous, carbonaceous, mottled and bauxitic at depth	33	207
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: gray, dense, crystalline, sandy, coarsely glauco- nitic, fossiliferous (macroshells)	4	211
Clay: dark-gray, silty, carbonaceous, micaceous, glauconitic, fossiliferous (Foraminifera at certain levels)		275
Cibicides howelli, Anomalina umbonifera at 221-236.		
Sand: fine to coarse-grained, subangular, abundantly glauco- nitic		296
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, grains of pale-green quartz; some clay (or fuller's earth), light-gray, blocky, somewhat indurated, micaceous		331
Clay (or fuller's earth); some sand, as above	10	341
Limestone: light-gray, dense (much calcitized), sandy, coarse- ly glauconitic, fossiliferous (macroshells, bryozoan remains, Ostracods, and Foraminifera); interbedded clay, black, fis- sile, carbonaceous, finely micaceous, pyritiferous, fossili- ferous (Foraminifera)		356
Robulus cf. R. degolyeri, Cibicides praecursorius, Cibicides howelli at 341-356.		

Well Logs of the Coastal Plain of Georgia	L	387
	Thickness (feet)	Depth (feet)
Limestone: as above, very sandy at depth		485
Discorbis midwayensis, Robulus midwayensis, Globulina gibba var., Eponides lotus, Cibicides praecursorius at 356- 371.		
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Limestone and sand: as above; marl, bluish-gray, silty, mica- ceous, pyritiferous, fossiliferous (macrofossils, Ostracods, and Foraminifera)		494
Anomalina pseudopapillosa at 485-494.		
Indurated sand: fine-grained, glauconitic, micaceous, fossili- ferous (macroshells, Ostracods, and Foraminifera); marl, as above	45	539
Marl: bluish-gray, silty, micaceous, pyritiferous, fossiliferous (macroshells and microfossils)	489	1,028

Planulina taylorensis at 936-952.

# Summary:

Residuum	62	62
Middle Eocene (Claiborne group, undifferentiated)	145	207
Lower Eocene (Wilcox group, undifferentiated)	89	296
Paleocene (Clayton formation)	189	485
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	543	1,028

# **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	115	207
Sand: fine to coarse-grained	29	310
Limestone	129	485

# TERRELL COUNTY

south of Dawson-Smithville Highway 118 Elev. Owner: No. 1 A. P. Lane		No.: GGS 211	285
Driller: C. M. Eubanks		Thickness (feet)	Depth (feet)
Residuum:			
Sand: fine to coarse-grained, argillaceous, brick-red, lin	nonitic	. 20	20
Clay: as above, with fragments of residual limestone		20	40
Quinqueloculina sp. at 20-30.			
Sand: fine to coarse-grained, angular, and fragments of dual limestone		40	80
Middle Eocene: Claiborne Group (Undifferentiated):			
Sand: fine to coarse-grained, fossiliferous (macrosh some clay, pale-green, fissile, somewhat indurated, s micaceous, carbonaceous	andy,	. 20	100
Sand: fine to coarse-grained, angular			130
Summary:			
Residuum		80	80
Middle Eocene (Claiborne group, undifferentiated)			130
Potential Water-Bearing Zones:			
Sand: fine to coarse-grained		30	130
	TER	RELL CO	UNTY
Location: Approximately 6 mi. southwest of Dawson, south side of Highway 82 at Graves School Owner: No. 1 Graves School Driller: Layne-Atlantic Company	Well Elev.	No.: GGS : 351	350
Drilled: July 1953		Thickness (feet)	Depth (feet)
Residuum:			
Sand: fine to coarse-grained, coarser-grained at depth; bedded clay, light-gray to brick-red, very sandy, limo		56	56
Middle Eocene: Claiborne Group (Undifferentiated):			
Clay: olive-green to tan to red (somewhat mottled), s sand, fine to coarse-grained		10	66

Well Logs of the Coastal Plain of Georgia	L	389
	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, somewhat indurated	10	76
Sand: fine to coarse-grained, angular	24	100
Sand: fine to coarse-grained, sparsely phosphatic; inter- bedded clay, yellowish-green, fissile, sandy, micaceous		162
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, carbonaceous, micaceous, pyritiferous; interbedded, well separated, relatively thin beds of lime- stone, gray, dense, sandy, glauconitic, fossiliferous (macro- shells)		242
Sand: fine to coarse-grained, subangular, micaceous, abun- dantly glauconitic, more indurated with depth, fossiliferous (some macroshells)	18	260
Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, scattered grains of pale-green quartz; some clay, dark-gray, silty, micaceous		304
Clay (or fuller's earth): light-gray, blocky, silty, carbona- ceous, micaceous		314
Limestone: light-gray, dense (much calcitized), somewhat saccharoidal, sandy, fossiliferous (casts and molds of mega- fossils)	19	333

# Summary:

Residuum	<b>56</b>	56
Middle Eocene (Claiborne group, undifferentiated)	106	162
Lower Eocene (Wilcox group, undifferentiated)	98	260
Paleocene (Clayton formation)	73	333

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	60	160
Sand: fine to coarse-grained	<b>26</b>	304
Limestone	19	333

### **Remarks:**

Samples of poor quality.

# TERRELL COUNTY

TER		RELL COUNTY	
	Well No.: Elev.: 34	No.: GGS 3 : 345	
Dimed. June 1995		kness et)	Depth (feet)
Residuum:			
Sand: fine to coarse-grained, angular; interbedded clay, r tled, sandy, limonitic; residual limestone, yellow, in stained, fossiliferous (Foraminifera)	ron-	82	82
Rotalia byramensis var., Quinqueloculina sp. at 15-23. Spiroloculina sp. at 23-33.			
Middle Eocene: Claiborne Group (Undifferentiated):			
Sand: fine to coarse-grained, limonitic, fossiliferous (ma shells at depth); interbedded clay, yellowish-green to cre sandy, fossiliferous (Foraminifera at certain horizons)	eam,	.08	190
Cibicides westi, Cibicides cf. C. refulgens at 105-125.			
Abundant macroshells at 94-105.			
Sand: as above		14	204
Cibicides tallahattensis and abundant macroshells at 201.	190-		
Lower Eocene: Wilcox Group (Undifferentiated):			
Limestone: gray, extremely dense, crystalline, sandy, coa ly glauconitic, fossiliferous (macroshells); some clay, de gray, silty, carbonaceous, micaceous, pyritiferous	ark-	24	228
Clay: as above, glauconitic and fossiliferous at depth		51	279
Eponides dorfi, Anomalina umbonifera, Cibicides prae sorius at 217-228.	cur-		
Sand: fine to medium-grained, subangular, abundantly g conitic, fossiliferous (macroshells and fish teeth)		31	310
Paleocene: Midway Group: Clayton Formation:			
Sand: fine to coarse-grained, subangular, scattered grain pale-green quartz; some clay (or fuller's earth), light-g silty, somewhat indurated, blocky, carbonaceous, micaceo	ray,	20	330
Clay (or fuller's earth) : as above		5	335
oray (or runce s caron), as above		9	000

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Limestone: light-gray, dense (much calcitized), sandy, coarse- ly glauconitic, pyritiferous, fossiliferous (macroshells, bryozoan remains, Ostracods and Foraminifera)	98	433
Eponides lotus, Globulina gibba var., Anomalina midway-		

ensis, Cibicides howelli, Cibicides praecursorius at 335-367.

#### Summary:

Residuum	82	82
Middle Eocene (Claiborne group, undifferentiated)	122	204
Lower Eocene (Wilcox group, undifferentiated)	106	310
Paleocene (Clayton formation)	<b>12</b> 3	433

#### Potential Water-Bearing Zones:

Sand: fine to coarse-grained	75	190
Sand: fine to coarse-grained	41	320
Limestone	98	433

#### **Remarks:**

Well cuttings of poor quality; not good enough to differentiate the Claiborne group.

## TERRELL COUNTY

Location: In Sasser	Well No.: GGS 368
Owner: City of Sasser	Elev.: 315
Driller: Layne-Atlantic Company	Thickness Depth (feet) (feet)

### **Residuum:**

Sand: fine to coarse-grained, angular, limonitic; some clay, dark-brown, sandy, carbonaceous	5	5
Clay: light-gray to red (mottled), sandy, limonitic	30	35
Clay: olive-green to tan, sandy; some mottled clay, as above	8	43
Clay: as above, with fragments of residual limestone, yellow to white, much leached, fossiliferous (macroshells and bryo-		
zoan remains)	21	64
Sand: fine to coarse-grained, angular	23	87
No samples	18	105

GEORGIA	GEOLOGICAL	SURVEY	BULLETIN	70
0		N 0 1 1 1 2 2		•••

	Thickness (feet)	Depth (feet)		
In Middle Eocene: Claiborne Group (Undifferentiated):				
Limestone: white, sandy, progressively sandier and more cal- citized (dense) with depth, fossiliferous (macroshells and some Foraminifera)	70	175		
Cibicides westi at 105-115.				
Sand: fine to coarse-grained; some limestone, as above		202		
Summary:				
Residuum	87	87		
No samples		105		
In middle Eocene (Claiborne group undifferentiated)		202		
Potential Water-Bearing Zones:				
Limestone		175		
Sand: fine to coarse-grained		202		

# TERRELL COUNTY

Location: City of Bronwood	Well No.: GGS 406
Owner: No. 1 City of Bronwood	Elev.: 375
Driller: Layne-Atlantic Company	
Drilled: November 1954	
	Thickness Depth (feet) (feet)

# **Residuum**:

Sand: fine to coarse-grained, angular; some clay, light-gray to brick-red (mottled), sandy	10	10
Clay: white to brick-red (mottled), sandy, limonitic	24	34
Clay: chocolate, blocky, carbonaceous, sandy; fragments of residual limestone	21	55
Sand: fine to coarse-grained, angular; some clay, as above	13	68

# Middle Eocene: Claiborne Group (Undifferentiated):

4
4

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		393
	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, angular Cibicides westi at 126.	30	134
Sand: fine to coarse-grained, subangular; interbedded thin stringers (clay partings) of clay, yellowish-green, some- what sandy, micaceous, fossiliferous (rare Foraminifera)	104	238
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, silty, carbonaceous, micaceous, glauconitic, pyritiferous		246
Limestone: light-gray, dense, much calcitized, sandy, coarse- ly glauconitic, fossiliferous (macroshells)		254
Clay: dark-gray, silty, carbonaceous, micaceous, pyritiferous, glauconitic; interbedded sand, fine to medium-grained, sub- angular, glauconitic	70	324
Indurated sand (or very sandy limestone): fine to coarse- grained, subangular, coarsely glauconitic, fossiliferous (mac- roshells)	6	330
Paleocene: Midway Group: Clayton Formation:		
Clay: gray to red (mottled), silty, micaceous, bauxitic?	20	350
Sand: fine to coarse-grained, subangular, scattered grains of pale-green quartz		366
Clay (or fuller's earth): gray, silty, blocky, carbonaceous, micaceous	6	372
Limestone: light-gray, dense, sandy, pyritiferous, glauco- nitic, fossiliferous (fragments and molds of megafossils, bryozoan remains, Ostracods and Foraminifera); inter- bedded clay, light-gray to black, fissile, carbonaceous, fine- ly micaceous, fossiliferous (Foraminifera)	28	400
Cibicides howelli, Cibicides praecursorius, Siphonina wil- coxensis at 373-382. Robulus degolyeri, Discorbis midwayensis var. trinitaten- sis, Cibicides howelli, Cibicides praecursorius, Alabamina wilcoxensis, Valvulineria scrobiculata at 382-392.		
Limestone: light-gray, dense, sandy, coarsely glauconitic, fossiliferous (fragments and molds of megafossils, bryo- zoan remains, Ostracods and Foraminifera)	53	453
Robulus midwayensis, Robulus degolyeri, Eponides lotus, Discorbis midwayensis, Discorbis midwayensis var. trini- tatensis, Anomalina midwayensis, Globulina gibba var. at 392-412.		

	Thickness (feet)	Depth (feet)
Summary:		
Residuum		68
Middle Eocene (Claiborne group, undifferentiated)		238
Lower Eocene (Wilcox group, undifferentiated)		330
Paleocene (Clayton formation)	123	453
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		126
Sand: fine to coarse-grained		190
Sand: fine to coarse-grained		366
Limestone		453
1	ERRELL CO	UNTY
	Vell No.: GGS lev.: 354	5 407
Dimeq. 1994	Thickness (feet)	Depth (feet)
Residuum:		
Sand: fine to coarse-grained, angular; interbedded clay, mo tled, sandy, carbonaceous, limonitic		23
Sand: as above; clay, chocolate; scattered fragments of re dual limestone		64
Milli Danner (Liberry Group, Lisban Danmetica)		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: yellowish-green, somewhat fissile, sandy, micaceon fossiliferous (some poorly preserved Foraminifera)		75
Spiroplectammina mississippiensis var., Textularia cuyle Siphonina claibornensis, Cibicides westi at 64-75.	ri,	
Sand: fine to coarse-grained, angular; some limestone, y low, sandy, fossiliferous (macroshells and Foraminifera)		85
Limestone: yellow, dense (much calcitized), saccharoid very sandy, fossiliferous (macroshells and Foraminifera)	•	105
Asterigerina lisbonensis at 85-105.		
Sand: fine to coarse-grained, angular, coarsely glauconit fossiliferous (macroshells)		126

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		395
Tallahatta Formation:	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, angular, coarsely glauconitic, sparsely phosphatic; interbedded marl, yellowish-green, fis- sile, sandy, micaceous, fossiliferous (Foraminifera at cer- tain horizons)		200
Cibicides tallahattensis at 126-146. Cibicides tallahattensis, Valvulineria danvillensis var. gy- roidinoides, Cibicides blanpiedi at 167-200.		
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: gray, extremely dense and crystalline, sandy, coarsely glauconitic, fossiliferous (some macroshells); some clay, dark-gray, silty, carbonaceous, micaceous, pyritifer- ous, glauconitic	28	228
Clay: dark-gray, silty, carbonaceous, micaceous, glauconitic, pyritiferous, fossiliferous (some Foraminifera at certain levels)	62	290
Robulus wilcoxensis, Eponides dorfi, Anomalina umbonifera, Valvulineria scrobiculata, Siphonina wilcoxensis at 228. Paleocene: Midway Group: Clayton Formation:		
Sand: fine to coarse-grained, subangular, scattered grains of pale-green quartz; some clay, gray to red (mottled), silty, micaceous, carbonaceous, bauxitic?	20	310
Sand: as above; some clay, dark-gray to black, somewhat fissile, carbonaceous, micaceous	51	361
Limestone: light-gray, dense (much calcitized), somewhat sandy, coarsely glauconitic, fossiliferous (fragments and molds of macroshells, bryozoan remains, Ostracods, and Foraminifera); interbedded marl, dark-gray, fissile, car- bonaceous, finely micaceous, pyritiferous, fossiliferous (Foraminifera)	11	372
Anomalina midwayensis, Robulus midwayensis, Globulina gibba var., Robulus alabamensis, Cibicides howelli at 361- 372.		
Limestone: as above	62	434
Summary:		
Residuum Middle Eocene (Lisbon formation)		$\begin{array}{c} 64 \\ 126 \end{array}$

Middle Eocene (Tallahatta formation)74200Lower Eocene (Wilcox group, undifferentiated)90290Paleocene (Clayton formation)144434

		ckness (eet)	Depth (feet)
<b>Potential Water-Bearing Zones:</b>			
Sand: fine to coarse-grained		95 71 62	200 361 434
Т	ERRE	LL CO	UNTY
	ell No. ev.: 3	.: GGS 74	503
		ckness feet)	Depth (feet)
Residuum and Middle Eocene (Undifferentiated): Sand: fine to coarse-grained, angular; some clay, light-gra to brick-red, sandy, limonitic		200	200
Lower Eocene: Wilcox Group (Undifferentiated):			
Clay: dark-gray to brown, somewhat fissile, micaceous, ca bonaceous, abundantly glauconitic		100	300
Paleocene: Midway Group: Clayton Formation:			
Sand: fine to coarse-grained, subangular, scattered grain of pale green quartz		50	350
Clay (or fuller's earth): dark-gray, blocky, silty, micaceou carbonaceous		10	360
Limestone: light-gray to white, dense (much calcitized sandy, coarsely glauconitic, pyritiferous, fossilifero (macroshells, bryozoan remains, Ostracods, and Foramin fera)	us 11-	95	455
Gyroidina aequilateralis, Eponides lotus, Globulina gibt Cibicides praecursorius at 355-365.	α,		
No samples		25	480
In Upper Cretaceous (Undifferentiated):			
Marl: bluish-gray, silty, somewhat chalky, pyritiferous, mic ceous, fossiliferous (macroshells, Ostracods, and Forami fera); interbedded sand, fine-grained, micaceous, pyri ferous, fossiliferous (macroshells, Ostracods, and For minifera)	n <b>i-</b> t <b>i-</b>	100	580
Anomalina pseudopapillosa at 480-490.			
Sand: fine to coarse-grained, angular, micaceous, phosphati	c	17	597

## WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

Summary:	Thickness (fe <b>et</b> )	Depth (feet)
Residuum and middle Eocene (undifferentiated)	200	200
Lower Eocene (Wilcox group, undifferentiated)	100	300
Paleocene (Clayton formation)	155	455
No samples		480
In Upper Cretaceous (undifferentiated)	117	597
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	150	200
Sand: fine to coarse-grained		350
Limestone	95	455

#### THOMAS COUNTY

Location: 8 mi. northeast of Thomasville Owner: No. 1 U.S. Army Air Field Driller: Stevens Southern Drilling Company Drilled: September 1942	Well No.: GGS Elev.: 225	5 19
	Thickness (feet)	Depth (feet)

## Pliocene to Recent (Undifferentiated):

Sand: fine-grained, somewhat argillaceous; inclusions of kao- lin (at depth), white, somewhat sandy	30	30
Miocene (Undifferentiated):		
Clay: white to tan to olive-green, sandy, somewhat carbo- naceous; fragments of limestone at depth	70	100
Clay: as above; some limestone, white, sandy	5	105
Limestone: white to light-brown (latter somewhat dolomi- tized), dense, crystalline, somewhat saccharoidal, sandy	50	155
Oligocene (Undifferentiated):		
Limestone: as above, but somewhat cherty, fossiliferous at depth	15	170
Asterigerina cf. A. subacuta at 160.		
Limestone: light-gray to white at depth, nodular, much cal- citized, fossiliferous (some macroshells, echinoid and bryo- zoan remains, and Foraminifera)	65	235
Rotalia mexicana var., Quinqueloculina sp. at 185. Dictyoconus <sup>1</sup> sp. at 225.		

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

	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:		
Dolomitic limestone: dark-brown to rather light-brown at depth, saccharoidal	25	260
Limestone: cream, considerably calcitized, somewhat crystal- line, fossiliferous (Foraminifera); interbedded dolomitic limestone, as above		300
Lepidocyclina sp. and Asterocyclina sp. common at 265. Gypsina globula at 280.		

# Summary:

Pliocene to Recent (undifferentiated)	30	30
Miocene (undifferentiated)	125	155
Oligocene (undifferentiated)	80	235
Upper Eocene (Ocala limestone)	65	300

# **Potential Water-Bearing Zones:**

Limestone		65	300
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	THOMAS CO	UNTY
Location: East side of Jackson Street, few hundred yd. east of Atlantic Coast Line R.R. depot at City Water Works in Thomasville	Well No.: GC Elev.: 256	S 132
Owner: City of Thomasville Well No. 5		
Driller: Layne-Atlantic Company		
Drilled: February 1949	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated): Sand: fine-grained, argillaceous, gray to tan (mottl angular, finely disseminated phosphatic grains Miocene (Undifferentiated):		35
Sand: fine to medium-grained, angular; some clay, li gray, sandy, gray to light-brown phosphatic pebbles		40
Limestone: white to light-brown, somewhat dolomitized, charoidal at depth, dense, sandy, cherty, sparsely fos ferous at depth	sili-	170

Archaias sp. at 150-170.

WELL LOGS OF THE COASTAL PL	AIN OF GEORGIA
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399

	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):	(100)	(1000)
Limestone: white to cream, nodular, crystalline, much calci- tized, fossiliferous (casts and impressions of megafossils and some Foraminifera)	130	300
Rotalia mexicana var., Quinqueloculina sp., Dictyoconus sp. at 170-300.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Dolomitic limestone: dark-brown to light-brown to white at depth, saccharoidal, gysiferous	205	505
Limestone: light-gray to white, saccharoidal, dense, crystal- line, much calcitized, gypsiferous at certain horizons, fos- siliferous (macroshells, echinoid remains and Foraminifera)	200	705
Lepidocyclina sp., Operculinoides sp. at 505-520. Gypsina globula at 530-545. Pseudophragmina flintensis at 570-585.		
Limestone: yellowish, crystalline, highly calcitized, some- what saccharoidal, fossiliferous (Foraminifera)	320	1,025
Camerina striatoreticulata, Amphistegina pinarensis var. at 770-790. Camerina striatoreticulata abundant at 920-945.		
In Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: cream, granular, rather loosely consolidated, cherty at depth dense, crystalline, coarsely glauconitic;		
interbedded marl, light-gray, somewhat indurated, fissile	587	1,612
Tallahatta Formation:		
Sand: fine to coarse-grained, angular, abundantly glauco- nitic, fossiliferous (some Foraminifera)	23	1,635
Operculinoides sp., Asterocyclina sp. at 1612-1620.		
Summary:		
Pliocene to Recent (undifferentiated)		35
Miocene (undifferentiated)	135	170
Olicogona (undifferentiated)	120	300

Oligocene (undifferentiated)	130	300
Upper Eocene (Ocala limestone)	725	1,025
In middle Eocene (Lisbon formation)	587	1,612
Middle Eocene (Tallahatta formation)	23	1,635

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

	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone	130	300
Limestone	. 270	770

#### Remarks:

Because the dolomitic limestone above carries gypsum (CaSO<sub>4</sub>) crystals, it yields highly mineralized water and is, therefore, not a source of good ground water. Sand at depth 1612-1635 contained salt water with chlorides approaching that of sea water, hence is not a source of fresh ground water.

	THOMAS (	COUNTY	
owner: City of Thomasville Elev.: 28 Driller: M. M. Gray Drilling Company		(o.: GGS 401 285 <sup>1</sup>	
Drilled: September 1954	Thicknes (feet)	s Depth (feet)	
Pliocene to Recent (Undifferentiated):			
Sand: fine-grained, argillaceous, mottled, limonitic		10	
Sand: fine-grained, argillaceous, olive-green to tan; with clusions of kaolin, white, sandy		35	
Miocene (Undifferentiated):			
Clay: white to light-gray to pale-green, sandy, phosphatic	15	50	
White to light-gray phosphatic pebbles prominent at 40-	50.		
Limestone: white, dense, sandy, cherty; interbedded san fine to medium-grained, angular; beds of clay, white light-gray to pale-green, sandy, phosphatic	to	100	
Limestone: light-brown, somewhat dolomitized and sacch roidal, dense, crystalline, sandy, fossiliferous (casts a molds of megafossils); interbedded clay, as above	n <b>d</b>	180	
Oligocene (Undifferentiated):			
Limestone: light-gray to white, dense, nodular, much cal tized, fossiliferous (some Foraminifera at various horizo		295	
Asterigerina subacuta at 180-190. $Dictyoconus^2$ sp. at 280-290.			

<sup>&</sup>lt;sup>1</sup>Average elevation based on Georgia State Highway Maps. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

Well LOGS OF THE COASTAL PLAIN OF GEO	RGIA	401
	Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Ocala Limestone:	·	·
Dolomitic limestone: dark-brown, saccharoidal, massive		400
Summary:		
Pliocene to Recent (undifferentiated)		35
Miocene (undifferentiated)		180
Oligocene (undifferentiated)		295
Upper Eocene (Ocala limestone)	105	400
Potential Water-Bearing Zones:		
Limestone	115	295
	THOMAS CO Well No.: GO Elev.: 384	
Driller: Layne-Atlantic Company		
Drilled: 1955	Thickness (feet)	Depth (fect)
• • •	(feet)	Depth (fect) 10
Drilled: 1955	(feet)	(feet)
Drilled: 1955 No samples	(feet)	(fect) 10
Drilled: 1955 No samples In Miocene (Undifferentiated):	(feet)	(fect) 10 15
Drilled: 1955 No samples In Miocene (Undifferentiated): Clay: bluish-gray to purple (mottled), sandy, limonitic	(feet) 	(fect) 10 15 28
Drilled: 1955 No samples In Miocene (Undifferentiated): Clay: bluish-gray to purple (mottled), sandy, limonitic Clay: yellowish-green, very sandy; some mottled clay, as a	(feet) 	(feet)
Drilled: 1955 No samples In Miocene (Undifferentiated): Clay: bluish-gray to purple (mottled), sandy, limonitic Clay: yellowish-green, very sandy; some mottled clay, as a No samples	(feet) 10 5 bove 13 9 23 19 19 19 10 10 10 10 10 10 10 10 10 10	(fect) 10 15 28 37 60
Drilled: 1955 No samples In Miocene (Undifferentiated): Clay: bluish-gray to purple (mottled), sandy, limonitic Clay: yellowish-green, very sandy; some mottled clay, as a No samples Sand: fine to medium-grained, angular Clay: yellowish to dark-green, somewhat indurated, tou phosphatic at depth, sandy; interbedded thin beds of sa	(feet) 10 5 bove 13 9 23 19 19 19 10 10 10 10 10 10 10 10 10 10	(fect) 10 15 28 37
Drilled: 1955 No samples In Miocene (Undifferentiated): Clay: bluish-gray to purple (mottled), sandy, limonitic Clay: yellowish-green, very sandy; some mottled clay, as a No samples Sand: fine to medium-grained, angular Clay: yellowish to dark-green, somewhat indurated, tou phosphatic at depth, sandy; interbedded thin beds of sa fine to medium-grained, angular	(feet) 10 10 5 bove 13 9 23 107 hat	(fect) 10 15 28 37 60 167
Drilled: 1955 No samples In Miocene (Undifferentiated): Clay: bluish-gray to purple (mottled), sandy, limonitic Clay: yellowish-green, very sandy; some mottled clay, as a No samples Sand: fine to medium-grained, angular Clay: yellowish to dark-green, somewhat indurated, tou phosphatic at depth, sandy; interbedded thin beds of sa fine to medium-grained, angular Light-brown phosphatic pebbles common at 126-147. Limestone: white to gray to light-brown, dense, somew	(feet) 10 10 5 bove 13 9 23 13 9 23 19 107 hat 226	(fect) 10 15 28 37 60

	Thickness (feet)	Depth (feet)
Oligocene and Upper Eocene (Undifferentiated):		
Dolomitic limestone: light-brown, saccharoidal		803
Pyrgo? sp. at 603-618. Rotalia mexicana var. at 680-700.		
Limestone: cream, much calcitized, granular, rather loosely consolidated and porous, fossiliferous (some "small" Fora- minifera)	102	905
Cibicides ocalanus, Uvigerina dumblei at 803-823. Robulus alato-limbatus, Siphonina jacksonensis, Uvigerina dumblei, Dentalina jacksonensis at 823-844.		

#### Summary:

No samples	10	10
In Miocene (undifferentiated)	506	516
Oligocene and upper Eocene (undifferentiated)	389	905

#### **Potential Water-Bearing Zones:**

Limestone	102	905
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#### Remarks:

The limestone section represented by this well is composed largely of dolomitic limestone which yields mineralized water. Hence, this area presents a problem in searching for satisfactory aquifers. There seem to be two possibilities in the solution of this problem, both requiring careful exploration however. The shallower-lying limestones of Miocene age may carry some ground water. Likewise the limestones occurring below 800 feet might deserve further development. However it is known that the mineralization of ground water in this area increases with depth.

# TIFT COUNTY

	Well No.: GC Elev.: 330	is 82
Drilled: June 1945	Thickness (feet)	Depth (feet)
No samples	10	10
In Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic	5	15

	Thickness (feet)	Depth (feet)
Clay: light-gray, sandy; interbedded sand, fine to coarse- grained, angular		107
Clay: dark-green, sandy	17	124
Limestone: white, dense, crystalline, sandy; interbedded beds of clay, dark-green, sandy	132	<b>25</b> 6

Sorites sp. at 215-216.

# Oligocene (Undifferentiated):

Limestone: cream to white at depth, nodular, much calcitized, massive, fossiliferous (some macroshells, echinoid and bryo- zoan remains and Foraminifera)	119	375
Rotalia mexicana var., Pyrgo sp., Quinqueloculina sp. at 256-264.		
Operculinoides sp., $Dictyoconus^1$ sp. at 260-276.		
Dictyoconus <sup>1</sup> sp. common at 347-357.		
No samples	21	396
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, crystalline, somewhat calcitized, fossilifer- ous (macroshells, echinoid and abundant bryozoan remains,		

ous (macroshells, echinoid and abundant bryozoan remains,		
and common to abundant Foraminifera)	105	501
Asterocyclina sp., Gypsina globula common at 396-419.		

Operculinoides floridensis, Heterostegina ocalana at 459.

### Summary:

No samples	10	10
In Miocene (undifferentiated)	<b>246</b>	256
Oligocene (undifferentiated)	119	375
No samples	21	396
In upper Eocene (Ocala limestone)	105	501

### **Potential Water-Bearing Zones:**

Limestone 241 50	Limestone		241	501
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<sup>&</sup>lt;sup>1</sup>Reworked(?) fossil of middle Eocene age.

## TIFT COUNTY

	TIFI	COUN'I	ľY
Location: At City Water Works in Tifton Owner: City of Tifton		No.: GG : 355	S 292
Driller: Stevens Southern Well Drilling Company		Thickness (feet)	Depth (feet)
No samples		20	20
In Miocene (Undifferentiated):			
Clay: mottled, sandy, limonitic		20	40
Clay: yellowish-green, sandy; interbedded sand, fine to a dium-grained, angular		. 90	130
No samples		10	140
Clay: as above; interbedded limestone, white, dense, calcitiz sandy		50	190
Limestone: white, dense, somewhat crystalline and sacc roidal, sandy		. 80	270
Oligocene (Undifferentiated):			
Limestone: yellow to white at depth, nodular, cherty, rat massive, somewhat sandy, fossiliferous (some macroshe echinoid and bryozoan remains, and Foraminifera)	ells,	. 70	340
Rotalia mexicana var. at 270-280.			
Lepidocyclina sp., Gypsina globula <sup>1</sup> at 300-310.			
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: cream, highly calcitized and crystalline, fos ferous at certain levels (echinoid and bryozoan remains some Foraminifera)	and	. 200	540
Gypsina globula common, Operculinoides sp., Lepidocyc sp., and bryozoan remains at 340-350.	lina		
Operculinoides floridensis at 390-400. Asterocyclina nassauensis at 420-430.			
Limestone: light-gray, crystalline and saccharoidal, hig calcitized		45	585
Summary:			
No samples			20
In Miocene (undifferentiated)		. 250	270

Oligocene (undifferentiated)
Upper Eocene (Ocala limestone)

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

		40
	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone	230	540
	TOOMBS CO	UNTY
Location: 4.5 mi. south of R.R. in Lyons via U.S. High- way 1, 1.4 mi. west of Highway 1 via east-west dirt road on north side of said road at top of prominent hill Owner: No. 1 Gibson Driller: Tropic Oil and Gas Company	Well No.: GC Elev.: 198	3S 95
Drilled: June 1945		
	Thickness (feet)	Depti (feet)
No samples		37
In Miocene (Undifferentiated):		
Limestone: white, somewhat recrystallized, calcitized; s phosphatic; some clay, pale-green, sandy	•	38
No samples		40
Sand: fine to medium-grained, subangular, phosphatic; clay, as above; limestone, white, sandy, phosphatic, siliferous (macroshells)	fos-	44
Oligocene (Undifferentiated):		
Limestone: gray, extremely dense, crystalline, cherty, sa sparsely phosphatic, fossiliferous (echinoid and bryc remains)	zoan	449
Limestone: reddish-brown, rather soft and chalky, fossil ous (echinoid and bryozoan remains and Foraminifera	lifer-	48
Rotalia mexicana var., Quinqueloculina sp. at 449-456.		
No samples		50
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: reddish-brown, soft and somewhat chalky, fossiliferous at certain levels (echinoid and bryozoan mains and "larger" Foraminifera)	n re-	63
Camerina striatoreticulata common to abundant, Lepic clina sp. at 512-520.	docy-	

	Thickness (feet)	Depth (feet)
Limestone: cream, soft, fossiliferous ("larger Foraminifera" and bryozoan remains)	. 126	760
Lepidocyclina sp. common at 634-662.		
Operculina mariannensis at 740-750.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: light-gray, calcitized and granular, somewhat loosely consolidated, glauconitic at depth, fossiliferous at certain levels (megafossils, echinoid and bryozoan remains, and some Foraminifera); interbedded dolomitic limestone, gray, saccharoidal, glauconitic at depth	330	1,090
Asterigerina sp., Nonion advena, Nonion inexcavatus, Dis- corbis assulata, Gyroidina soldanii var., Cibicides ameri- canus var. at 760-770.		
Glauconite common at 1033-1088.		
Tallahatta Formation:		
Limestone: as above; interbedded sand, fine to medium- grained, subangular, coarsely glauconitic; limestone, white, rather massive, coarsely glauconitic, fossiliferous (frag- ments, casts and molds of megafossils)	90	1,180
Sand: fine to medium-grained, subangular, phosphatic, some- what indurated at certain levels	130	1,310
In Lower Eocene(?): Wilcox Group (Undifferentiated):		
Clay: dark-gray, somewhat indurated and fissile, micaceous, carbonaceous, glauconitic, fossiliferous (megafossils and some Foraminifera); interbedded thin beds of claystone, dark-gray, dense, abundantly glauconitic, cherty; beds of sand, as above	145	1,455
Paleocene: Midway Group: Clayton Formation:		
Limestone: light-gray, dense, crystalline, sandy, coarsely glauconitic, fossiliferous at certain levels (macroshells with bryozoan remains); interbedded clay, dark-gray to black, somewhat fissile, carbonaceous, micaceous	90	1,545
		,
Sand: medium-grained, angular; interbedded clay, as above	155	1,700
Unner Cretaceous(?) (Undifferentiated).		

# **Upper Cretaceous(?) (Undifferentiated):**

Sand: fine to coarse-grained, angular; clay, dark-gray, some-		
what fissile, micaceous, pyritiferous	151	1,851

Well Logs of the Coastal Plain of Georgia		407	
	Thickness (feet)	Depth (feet)	
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		(,	
Sand: fine to medium-grained, angular; interbedded clay, dark-gray, micaceous, pyritiferous, fossiliferous at certain horizons (Foraminifera)	149	2,000	
Anomalina pseudopapillosa at 1851-1856. Planulina taylorensis at 2157-2162.			
Marl: dark-gray to brown at depth, silty, carbonaceous, mica- ceous, pyritiferous, fossiliferous at certain horizons (macro- shells and Foraminifera)	358	2,358	
Marl: as above; interbedded sand, fine to medium-grained, an- gular, glauconitic, phosphatic, fossiliferous at certain hori- zons (macroshells)	262	2,620	
Sand: fine to medium-grained, angular, phosphatic, somewhat indurated, fossiliferous (macroshells)	50	2,670	
Tuscaloosa Formation:			
Sand: fine to coarse-grained, angular, arkosic; relatively thin stringers of clay, gray to pale-green, somewhat fissile, iron- stained, micaceous, sandy	130	2,800	
Clay or shale: gray, carbonaceous, micaceous having a some- what speckled appearance; interbedded sand, fine to coarse- grained, angular, arkosic	130	2,930	
Sand: fine to coarse-grained, angular	91	3,021	
Sand: coarse-grained, angular, arkosic, rather massive; in- terbedded clay, green to red (mottled), micaceous, sideritic, sandy	489	3,510	
Lower Cretaceous(?) (Undifferentiated):			
Clay: mottled, waxy, highly micaceous, sandy; interbedded sand, fine to coarse-grained, angular, arkosic	153	3,663	
Sideritic nodules common at 3552-3562.			
Basement Complex (Undifferentiated):			
Crystalline rocks	17	3,680	
Summary:			
No samples		375	
In Miocene (undifferentiated)		448 486	
Oligocene (undifferentiated) No samples		486 506	
In upper Eocene (Ocala limestone)		760	

	Thickness (feet)	Depth (feet)
Middle Eocene (Lisbon formation)	330	1,090
Middle Eocene (Tallahatta formation)	220	1,310
In lower Eocene(?) (Wilcox group, undifferentiated)	145	1,455
Paleocene (Clayton formation)		1,700
Upper Cretaceous(?) (undifferentiated)		1,851
Upper Cretaceous (post-Tuscaloosa, undifferentiated)		2,670
Upper Cretaceous (Tuscaloosa formation)		3,510
Lower Cretaceous(?) (undifferentiated)	153	3,663
Basement complex (undifferentiated)		3,680

# Potential Water-Bearing Zones:

Limestone	310	760
Sand: fine to medium-grained	130	1,310
Sand: medium-grained	135	1,680

# TREUTLEN COUNTY

Military District 1386 Ele Owner: No. 1 James Fowler Driller: Rose and Ray	Well No.: GGS 127 Elev.: 291	
Drilled: 1940	Thickness (feet)	Depth (feet)
No samples		765
In Middle Eocene: Claiborne Group (Undifferentiated): Limestone: light-gray to white, dense, crystalline, sand phosphatic (finely disseminated), coarsely glauconitic, for siliferous (fragments, casts and molds of megafossils, of tracods and Foraminifera)	os- )s-	895
Nonion advena, Gyroidina soldanii var., Eponides jackso ensis, Nonion inexcavatus, Cibicides pseudoungerians Cibicides americanus var. at 765-815. Lepidocyclina (Polylepidina) antillea, Asterigerina sp. 815-825. Asterocyclina monticellensis at 835-855.	из,	
Indurated sand: dark-gray, somewhat argillaceous, den phosphatic (finely disseminated), carbonaceous, micaceor fossiliferous (some Foraminifera) <i>Cibicides blanpiedi</i> at 895-915.	us,	915

•	Thickness	Depth
Limestone: gray, dense, crystalline, sandy, coarsely glaucon- itic; interbedded marl, light-gray, silty, micaceous, carbon-	(feet)	(feet)
aceous, glauconitic (finely disseminated), fossiliferous (some Foraminifera)		945
Reussella subrotundata, Cibicides mauricensis at 915-935.		
Indurated sand: as above, but fossiliferous (a coquina)		965
No samples		985
Limestone: gray, dense, coarsely glauconitic, sandy, fossilifer- ous (abundant macroshells and some Foraminifera)	20	1,005
Sand: fine to coarse-grained, phosphatic		1,085
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: dark-gray, somewhat fissile, silty, lignitic, micaceous; interbedded sand, fine to medium grained	170	1,255
Siphonina prima at 1165-1185.		
Paleocene: Midway Group: Clayton Formation:		
Limestone: gray to white at depth, dense, crystalline, sandy, coarsely glauconitic, fossiliferous (casts and molds of mega- fossils, bryozoan remains, and Foraminifera)	40	1,295
Robulus sp., Discorbis midwayensis, Discorbis midwayensis var. trinitatensis, Sigmomorphina semitecta var., Valvulin- eria scrobiculata, Eponides lotus, Siphonina wilcoxensis, Cibicides howelli at 1275-1295.		
Sand: fine to coarse-grained	20	1,315
In Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Sand: as above; some clay, chocolate-brown to dark-gray, mi-		
caceous, somewhat fissile	20	1,335
Sand: fine to coarse-grained, angular, arkosic, grains of "rose quartz"		1,415
No samples		1,555
Clay: brown, carbonaceous, very micaceous, pyritiferous, fos-	110	1,000
siliferous (macroshells and Foraminifera at certain levels); interbedded sand, fine to coarse-grained, angular	320	1,875
Planulina taylorensis at 1695-1715.		
Kyphopyxa christneri at 1795-1815.		
Sand: fine to coarse-grained, angular, highly micaceous, abun- dantly phosphatic; interbedded shale, dark-gray, fissile, mi-		
caceous (finely disseminated, "speckled")		2,005
No samples	30	2,035

	Thickness (feet)	Depth (feet)
In Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular; interbedded clay, yel-		
lowish-green, fissile, micaceous, somewhat carbonaceous		2,125

#### Summary:

No samples	765	765
In middle Eocene (Claiborne group, undifferentiated)	320	1,085
Lower Eocene (Wilcox group, undifferentiated)	170	1,255
Paleocene (Clayton formation)	60	1,315
In Upper Cretaceous (post-Tuscaloosa, undifferentiated)	690	2,005
No samples	30	2,035
In Upper Cretaceous (Tuscaloosa formation)	90	2,125

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	80	1,085
Sand: fine to coarse-grained	80	1,415

### **Remarks:**

The Ocala limestone lies somewhere in the interval 0-765 and constitutes an additional source of ground water besides being at a much shallower depth below land surface datum than the aquifers noted above.

	TURNER C	OUNTY
Location: 0.7 mi. northwest of Coverdale Owner: No. 1 C. W. Dearso Driller: Winter Hardware Company	Well No.: G Elev.: 413	GS 2
Drilled: October 1942		
	Thickness (feet)	s Depth (feet)
No samples	10	10
In Miocene (Undifferentiated):		
Clay: gray, sandy; interbedded sand, fine to coarse-grain angular	,	80
Clay: yellowish-green, sandy; interbedded sand, as above	155	235
Oligocene (Undifferentiated):		
Limestone: white, dense, nodular, calcitized, fossilifer (bryozoan remains and some Foraminifera)		260

Rotalia mexicana var. at 240-260.

# WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

Ę'

	Thickness (feet)	Depth (feet)
Summary:		
No samples	10	10
In Miocene (undifferentiated)		235
Oligocene (undifferentiated)	25	260
Potential Water-Bearing Zones:		
Limestone	25	260

		UNII
way 112	Well No.: GG Elev.: 399	S 13
Owner: No. 1 J. W. Hallman Driller: Winter Hardware Company Drilled: October 1942		
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic	100	100
Clay: yellowish-green, sandy; interbedded sand, fine to coar grained, angular, arkosic		180
Limestone: white, dense, sandy		200
In Oligocene (Undifferentiated): Limestone: white, dense, nodular, recrystallized, fossilifere (some Foraminifera)		240
Rotalia mexicana var., Asterigerina subacuta at 200-220.		
Summary:		
Miocene (undifferentiated)	200	200
In Oligocene (undifferentiated)	40	240
Potential Water-Bearing Zones:		
Limestone		240

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TURNER COUNTY

TURNER COUNTY

	TURNER CO	DUNTY
Location: 4 mi. southwest of Ashburn on Highway 112, Land Lot 50, 2nd Land District Owner: No. 1 W. B. Hobby Driller: W. B. Graham Drilled: 1947	Well No.: GG	S 164
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		30
Clay: light-gray, sandy; interbedded sand, fine to coa grained, angular		90
Clay: dark-green, sandy, somewhat indurated at certain le		180
Limestone: white, dense, sandy		200
<ul> <li>Oligocene (Undifferentiated):</li> <li>Limestone: white, nodular, recrystallized, much calcitized, siliferous (some Foraminifera)</li> <li>Rotalia mexicana var., Pyrgo sp., Gypsina globula<sup>1</sup>, Dia conus<sup>1</sup> sp. at 200-210.</li> <li>Asterigerina subacuta at 250-260.</li> </ul>		320
Lepidocyclina sp. at 300-310.		
Summary:		
Miocene (undifferentiated) Oligocene (undifferentiated)		200 320
Potential Water-Bearing Zones:		
Limestone		320
	TURNER CO	)UNTY
Location: 3.75 mi. (map distance) northwest of Ashburn, near Highway 7 on county side road Owner: No. 1 V. H. Burke Driller: H. B. Truluck	Well No.: G0 Elev.: 386	GS 210
	Thickness (feet)	Depth (feet)
No samples		35
In Miocene (Undifferentiated):		
Clay: light-gray, sandy; interbedded sand, fine to coa grained, angular, arkosic		105
<sup>1</sup> Reworked(?) fossil of middle Eocene age.		

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

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		413
	Thickness (feet)	Depth (feet)
Limestone: cream, sandy, cherty at certain levels; some clay, yellowish-green, sandy	30	135
Clay: yellowish-green, sandy, somewhat indurated	10	145
In Oligocene (Undifferentiated):		
Limestone: white, dense, crystalline, calcitized, fossiliferous (macroshells, bryozoan remains, and some Foraminifera)	40	185
Asterigerina sp. at 145-155. Rotalia mexicana var. at 155-165.		
No samples	40	225
Limestone: as above, but more calcitized; some sand, fine to medium-grained, angular	?	225
Summary:		
No samples		35
In Miocene (undifferentiated)		145
In Oligocene (undifferentiated)	80	225
Potential Water-Rearing Zones.		

#### **Potential Water-Bearing Zones:**

Limestone		40	185
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## TURNER COUNTY

Well No.: GGS	S 557
Elev.: 430	
Thickness (feet)	Depth (feet)
	Elev.: 430 Thickness

# Miocene (Undifferentiated):

Clay: pale-green to tan to purple to red (mottled), sandy, limonitic; interbedded sand, fine to coarse-grained, angular,		
arkosic	190	190
Clay: pale-green, blocky, sandy; interbedded sand, as above;		
limestone, white, sandy	90	280

	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		
Limestone: white to cream, nodular, massive, much calcitized, fossiliferous (some megafossils, bryozoan remains, and Foraminifera)	105	385
Asterigerina subacuta, Gypsina globula <sup>1</sup> at 280-290. Rotalia mexicana var. at 290-300. Lepidocyclina sp. at 300-310.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream to light-brown, somewhat dolomitized at certain levels, much calcitized, granular, fossiliferous (com- mon to abundant bryozoan remains and Foraminifera)	140	525
Lepidocyclina chaperi at 385-395. Robulus sp., Eponides jacksonensis, Gypsina globula, Lepi- docyclina chaperi at 395-405.		
Sand: fine to coarse-grained, angular; limestone, white to cream-colored, somewhat granular and calcitized, fossilifer- ous ("larger Foraminifera")	30	555
Asterocyclina sp. at 525-535.		
Limestone: cream, rather soft and porous, granular, much cal- citized, fossiliferous ("larger Foraminifera")	110	665
Operculina cf. O. mariannensis, Camerina striatoreticulata at 555-565.		
Amphistegina pinarensis var. at 575-585. Asterocyclina sp. common at 635-645.		
No samples	5	670
In Middle Eocene: Claiborne Group: Lisbon Formation:		
Marl: light-gray, silty, micaceous, fossiliferous (some Fora- minifera at certain levels); interbedded limestone, dark- green, massive, dense, crystalline, coarsely glauconitic at depth, pyritiferous, fossiliferous (megafossils and some bryozoan remains)	80	750
Operculinoides sp., Cibicides pseudoungerianus var. lisbon- ensis at 670-680.		
Sand: fine to coarse-grained, angular, phosphatic; some marl and limestone, as above	20	770
<sup>1</sup> Reworked(?) fossil of middle Eocene age.		

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Summary:		
Miocene (undifferentiated)	280	280
Oligocene (undifferentiated)	105	385
Upper Eocene (Ocala limestone)		665
No samples		670
In middle Eocene (Lisbon formation)	100	770

# Potential Water-Bearing Zones:

Limestone	245	525
Limestone	110	665
Sand: fine to coarse-grained	20	770

#### TURNER COUNTY

Location: In Ashburn Owner: City of Ashburn Driller: Layne-Atlantic Company Drilled: July 1957 Well No.: GGS 565 Elev.: 430

	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, blocky, sandy, limonitic; interbedded sand, fine to coarse-grained, subangular, arkosic	87	87
Clay: as above, but somewhat indurated, tough; sand, as above	. 125	212
Oligocene (Undifferentiated):		
Limestone: white, somewhat nodular, massive, recrystallized and saccharoidal, fossiliferous (some macroshells, echinoid and bryozoan remains, and Foraminifera)	63	275
Asterigerina subacuta, Quinqueloculina sp., Dictyoconus <sup>1</sup> sp. at 212-230.		
Rotalia mexicana var. common at 230-232.		
$Gypsina \ globula^1$ at 260-270.		
Limestone: cream, massive, calcitized, somewhat nodular, cherty, relatively unfossiliferous	115	390

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

	Thickness (feet)	Depth (feet)
In Upper Eocene: Jackson Group: Ocala Limstone:		
Limestone: cream, calcitized, granular (in texture), fossil- iferous at certain levels (bryozoan remains and Foramini- fera)	260	650
Lepidocyclina chaperi at 397-419.		
Lepidocyclina ocalana at 541-551.		
Amphistegina pinarensis var. at 582-595.		

### Summary:

Miocene (undifferentiated)	212	212
Oligocene (undifferentiated)	178	390
In upper Eocene (Ocala limestone)	<b>260</b>	650

# Potential Water-Bearing Zones:

Limestone		438	650
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### TWIGGS COUNTY

Location: Approximately 3.5 mi. east of Huber, 2.5 mi. east of U.S. Highway 129, and 1.5 mi. south of a cross-	Well No.: GGS 354 Elev.: 507
roads at machine shop	
Owner: J. M. Huber Company	
Driller: Southeastern Drilling Company	
Drilled: August 1953	
	Thickness Depth (feet) (feet)

## Upper Eocene: Jackson Group: Barnwell Formation:

Clay: red, very sandy, limonitic	20	20
Clay: yellowish-green, carbonaceous, blocky	30	50
Limestone: white, somewhat leached, sandy at depth, fossil- iferous (macroshells, echinoid and abundant bryozoan re-		
mains)	40	90
Sand: fine to coarse-grained, angular; inclusions of kaolin, white, micaceous	20	110
Upper Cretaceous: Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular	30	140
Kaolin: white to dark-gray, micaceous, carbonaceous, sandy	20	160
Sand: fine to coarse-grained, angular	25	185

#### WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	411
Phielemann	D

Depth (feet)

#### Summary:

Upper Eocene (Barnwell formation)	110	110
Upper Cretaceous (Tuscaloosa formation)	75	185

#### **Potential Water-Bearing Zones:**

None because static water level is below total depth of well.

TWIGGS C				
		Well No.: GGS 360 Elev.: 470		
Drilled: October 1953	Thickness (feet)	Depth (feet)		
Upper Eocene: Jackson Group: Barnwell Formation:				
Clay: olive-green to red (mottled), very sandy, limonitic		15		
Clay: yellowish-green, sandy; fragments of limestone		32		
Limestone: white, very sandy		46		
Sand: fine to coarse-grained, somewhat arkosic		106		
Upper Cretaceous: Tuscaloosa Formation:				
Sand: fine to coarse-grained, angular; interbedded clay kaolin)	•	336		
Kaolin: white, micaceous		342		
Summary:				
Upper Eocene (Barnwell formation)		106		
Upper Cretaceous (Tuscaloosa formation)		342		
Potential Water-Bearing Zones:				
Sand: fine to coarse-grained		260		
Sand: fine to coarse-grained		305		
Sand: fine to coarse-grained		<b>33</b> 6		

#### **Remarks:**

Well samples of poor quality.

	TW	IGGS COI	UNTY
Location: Approximately 1 mi. south of Dry Branch, 1.5 mi. east of U.S. Highway 80 Owner: Georgia Kaolin Company Driller: Layne-Atlantic Company Drilled: March 1955		1 No.: GG 7.: 430	S 415
Diffied. Match 1999		Thickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:			
Sand: fine to medium-grained, gray, argillaceous		24	<b>24</b>
Sand: fine to coarse-grained, angular, somewhat arkosic			44
Upper Cretaceous: Tuscaloosa Formation:			
Kaolin: micaceous, somewhat sandy		21	65
Sand: fine to coarse-grained, angular, arkosic		117	182
Kaolin: mottled, micaceous, somewhat sandy			194
Sand: coarse-grained, angular; kaolin, white		14	208
Clay: brick-red, micaceous, sandy			231
Sand: fine to coarse-grained, angular, arkosic			372

#### Summary:

Upper Eocene (Barnwell formation)	44	44
Upper Cretaceous (Tuscaloosa formation)	328	372

#### **Potential Water-Bearing Zones:**

Sand: fin	e to	coarse-grained		100	331
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#### **Remarks**:

Well samples of poor quality.

#### TWIGGS COUNTY

Location: Northeastern part of county, 1.75 mi. southeast Well No.: GGS 416 of Liberty Church which is 0.75 mi. east of Myerick's Pond Elev.: 380 Owner: No. 23 Georgia Kaolin Co. Driller: Layne-Atlantic Company Drilled: March 1955 Thickness Depth (feet)

Upper	Eocene:	Jackson	Group:	Barnwell	Formation:	
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Clay: mottled, very sandy, limonitic\_\_\_\_\_666

## WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

	Thickness (feet)	Depth (feet)
Marl: light-gray, silty, glauconitic		23
Sand: fine to coarse-grained, angular, phosphatic; interbedded marl, as above		68
Sand: fine to coarse-grained, angular	22	90
Upper Cretaceous: Tuscaloosa Formation:		
Clay: light-gray, sandy, micaceous	10	100
Sand: fine to coarse-grained, angular, somewhat arkosic; interbedded clay, as above		185
Sand: coarse-grained, angular, arkosic; interbedded thin beds of kaolin		433
Summary:		
Upper Eocene (Barnwell formation)		90
Upper Cretaceous (Tuscaloosa formation)		433
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	228	413
<b>Remarks:</b> Well samples of poor quality.		
W	ARE COUN	TY
	ell No.: GG ev.: 142	S 36
Pliocene to Recent (Undifferentiated):		
Sand: fine to coarse-grained, finely disseminated phosphatic grains		15
Clay: pale-green to red (mottled), sandy	10	25
Sand: medium to coarse-grained, arkosic	17	42
Sand: as above; clay, tan to red (mottled), sandy; fragments of limestone, light-gray, dense, sandy		62

# Miocene (Undifferentiated):

Clay:	dark-green,	sandy;	interbedded	sand,	fine	to	coarse-		
grai	ned, phospha	tic						265	327

Thickness (feet)	Depth (feet)
50	377
63	440
	490
	498
	(feet) 50 63 50

# Upper Eocene: Jackson Group: Ocala Limestone:

$\mathbf{L}$	imestone: cream, much calcitized, saccharoidal, fossiliferous (Foraminifera)	123	621
	Gypsina globula, Operculinoides floridensis at 550-560.		
	Asterocyclina nassauensis at 570-580.		

#### Summary:

Pliocene to Recent (undifferentiated)	<b>62</b>	62
Miocene (undifferentiated)	428	490
Oligocene (undifferentiated)	8	498
Upper Eocene (Ocala limestone)	123	621

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	50	377
Limestone	131	621

#### WARE COUNTY

Location: In City of Waycross	Well No.: GGS 366
Owner: No. 3 City of Waycross	Elev.: 140
Driller: Layne-Atlantic Company	
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine to medium-grained, finely disseminated phosphatic grains and scattered kaolin inclusions	10	10
Sand: fine to coarse-grained, arkosic, rounded; clay, light- gray to red (mottled), sandy	15	25
Clay: pale-green to purple (mottled), sandy	15	40
Sand: fine to coarse-grained, arkosic, rounded	25	65
<sup>1</sup> Reworked(?) fossil of middle Eocene age.		

WELL LOGS OF THE COASTAL PLAIN OF GEORGE	Well	LOGS C	OF THE	COASTAL	Plain	OF	GEORGIA
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421

Thickness Depth (feet) (feet)

# Miocene (Undifferentiated):

Clay: dark-green, sandy; interbedded sand, fine to coarse- grained, phosphatic	135	200
Sand: fine to coarse-grained, phosphatic	50	250
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; interbedded limestone, white, sandy; sand, fine to coarse-grained, phosphatic	90	340
Clay: light-gray, calcareous	20	360
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; interbedded limestone, white, sandy; sand, fine to coarse-grained, phosphatic	70	430
Limestone: white, dense (much calcitized), sandy, phosphatic, fossiliferous (fragments and molds of megafossils)	60	490
Oligocene (Undifferentiated):		
Limestone: light-gray, dense (much calcitized), nodular, fos- siliferous (some Foraminifera)	20	510
Dictyoconus <sup>1</sup> sp., Quinqueloculina sp. at 490-500.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, dense (much calcitized), fossiliferous (For- aminifera)	265	775
Gypsina globula at 510-520. Asterocyclina nassauensis, Operculinoides sp. at 550-560. Amphistegina pinarensis var. at 680-690.		

#### Summary:

Pliocene to Recent (undifferentiated)	<b>65</b>	65
Miocene (undifferentiated)	425	490
Oligocene (undifferentiated)	20	510
Upper Eocene (Ocala limestone)	265	775

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	50	250
Limestone	285	775

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

WARE COUNTY

	WARD COON	
Location: 1 block northeast of Post Office at Coca Cola Plant in Waycross Owner: No. 1 Coca Cola Company Driller: M. M. Gray Drilling Company Drilled: January 1957	Well No.: GGS 527 Elev.: 140 <sup>1</sup>	
Drined: January 1957	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, argillaceous, finely dissonated phosphatic grains and kaolin inclusions		15
Miocene (Undifferentiated):		
Clay: mottled, sandy, some sand as above		40
Sand: fine to coarse-grained, angular, arkosic		100
Sand: coarse-grained, arkosic; clay, dark-green, sandy	260	360
Black phosphatic pebbles abundant at 310-320.		
Dolomitic limestone: light-brown, saccharoidal, sandy, p phatic; interbedded limestone, white, dense (much c tized), sandy, phosphatic	alci-	480
Oligocene (Undifferentiated):		
Limestone: cream, very dense (highly calcitized), fossili ous (Ostracods and Foraminifera)		500
Dictyoconus <sup>2</sup> sp., Quinqueloculina sp. at 480-490.		
No samples		520
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, very dense (highly calcitized), fo iferous (abundant Foraminifera)		690
Gypsina globula, Pseudophragmina flintensis, Asterocyc nassauensis at 520-530.	elina	
Limestone: cream, much calcitized, massive		708
Summary:		708
Summary: Pliocene to Recent (undifferentiated)		1
Summary: Pliocene to Recent (undifferentiated) Miocene (undifferentiated)		708 18 480
Summary: Pliocene to Recent (undifferentiated) Miocene (undifferentiated) Oligocene (undifferentiated)		15 480 500
Summary: Pliocene to Recent (undifferentiated) Miocene (undifferentiated)		1 48

<sup>1</sup>Average elevation based on Georgia State Highway Maps. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L	423
	Thickness (feet)	Depth (feet)
Potential Water-Bearing Zones:		
Limestone	228	708
Remarks:		
Samples of poor quality.		
WA	RE COUN	ITY
	ll No.: GG	
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: medium to coarse-grained, subangular		25
Clay: pale-greenish-gray, sandy, micaceous		85
Miocene (Undifferentiated):		
Clay: dark-olive-green to brownish-gray, sandy		147
No samples		157
Sand: fine to medium-grained, subangular		167
Sand: coarse-grained, subrounded, phosphatic, arkosic	10	177
Limestone: light-gray to light-brown, much calcitized, saccha- roidal, sandy, phosphatic, cherty		208
Brownish-gray chert (or siltstone?) prominent at 198-208.		
Clay: greenish-gray, blocky, sandy, phosphatic; interbedded sand, fine to medium-grained, subangular	62	270
Limestone: cream to light-brown, saccharoidal, sandy, phos- phatic	30	300
Sand: medium to coarse-grained, subangular, phosphatic	11	311
Limestone: cream to light-gray, saccharoidal, sandy, phos- phatic, fossiliferous (megafossils, echinoid and bryozoan remains, and some Foraminifera at depth)		403
First observed megafossils at 311-321.		
Elphidium sagrum, Elphidium poeyanum, Valvulineria sp., Cibicides concentricus at 403-413.		
Limestone: light-brown, saccharoidal, sandy, phosphatic	10	413

Oligocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: light-gray to cream at depth, rather massive, somewhat nodular, fossiliferous (bryozoan remains and some Foraminifera)	62	475
Quinqueloculina sp., Rotalia mexicana var. at 413-423. Dictyoconus <sup>1</sup> sp., Quinqueloculina sp. at 423-434. Gypsina globula <sup>1</sup> at 465-475.		
No samples	9	484
In Upper Eocene: Jackson Group: Ocala Limestone: Limestone: cream, relatively soft and porous, calcitized, granular, fossiliferous (bryozoan remains and some Fora- minifera)	114	598
Operculinoides sp. at 484-495.		
Asterocyclina sp., Operculinoides sp. at 505-516.		

# Summary:

Pliocene to Recent (undifferentiated)	85	85
Miocene (undifferentiated)	328	413
Oligocene (undifferentiated)	62	475
No samples	9	484
In upper Eocene (Ocala limestone)		598

# Potential Water-Bearing Zones:

.14	4	59	8
	14	.14	.14 59

# WASHINGTON COUNTY

Location: 1.4 mi. southwest of junction of Highways	Well No.: GGS 94	
15 and 24 in Sandersville, near east side of High-	Elev.: 465	
way 15 near concrete reservoir		
Owner: City of Sandersville well no. 5		
Driller: Layne-Atlantic Company		
Drilled: June 1944		
	Thickness (feet)	Depth (feet)

# Miocene: Hawthorn Formation:

Clay: bluish-green to red (mottled), light-gray at depth, blocky, sandy, limonitic	50	50
Upper Eocene: Jackson Group: Barnwell Formation:		
Sand: fine to medium-grained, angular, somewhat indurated	<b>5</b>	5 <b>5</b>
Percented forcil of middle Forces and		

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

	Thickness (feet)	Depth (feet)
Limestone <sup>1</sup> : white, dense, somewhat saccharoidal (calcitized), sandy, much sandier at depth, cherty, coarsely but sparsely glauconitic, fossiliferous (echinoid and bryozoan remains		
and Ostracods)		117
Sand: fine to coarse-grained, subangular	13	130
Marl: light-gray, silty, blocky, fossiliferous (echinoid and bryozoan remains, macroshells, Ostracods, and Foraminifera	) 23	153
Elphidium sp., Nonion advena, Nonion inexcavatus, Val- vulineria jacksonensis at 132-134.		
Limestone (or coquina): gray, dense, somewhat saccharoidal, very sandy, fossiliferous (fragments and casts and molds of megafossils)	13	166
Marl: light-gray, somewhat indurated, fissile, silty, progres- sively sandier at depth, carbonaceous, fossiliferous (echinoid and bryozoan remains, Ostracods, and Foraminifera)	16	182
Limestone (or coquina): gray to cream, crystalline to saccha- roidal, very sandy, fossiliferous (fragments and molds of megafossils)		187
Marl: light-brown, somewhat indurated, fissile, carbonaceous, sandy	. 10	197
Sand: fine to coarse-grained, angular		202
Marl: gray, somewhat indurated, fissile, carbonaceous, sandy		207
Limestone (or coquina): greenish-gray, dense, very sandy, phosphatic (finely disseminated), fossiliferous (casts and molds of megafossils and bryozoan remains)	- 53	260
Upper Cretaceous: Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, limonitic; some clay (or kaolin), gray to red (mottled), micaceous; limestone, "cave" from above	6	266
Kaolin: gray, blocky, micaceous, somewhat sandy		271
Kaolin: white, micaceous, somewhat sandy		342
Clay: gray to dark-brown, lignitic	20	362
Sand: fine to coarse-grained; interbedded thin stringers of clay, as above		443

<sup>&</sup>lt;sup>1</sup>Probable Sandersville limestone.

	Thickness (feet)	Depth (feet)	
Clay: brick-red, micaceous, sandy	21	464	
Sand: fine to coarse-grained; interbedded clay, gray to dark- brown to black to mottled, micaceous, somewhat sandy, lig-			
nitic	163	627	
Sand: fine to coarse-grained, very coarse-grained and gravelly at depth; interbedded clay, gray to green to red, somewhat			
fissile, micaceous, sandy	244	871	
Basement Complex (Undifferentiated):			
		070 5	

Crystalline rock	I.ð	872.5
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# Summary:

Miocene (Hawthorn formation)	50	50
Oligocene(?) (undifferentiated)	80	130
Upper Eocene (Barnwell formation)	130	260
Upper Cretaceous (Tuscaloosa formation)	611	871
Basement complex (undifferentiated)	1.5	872.5

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	13	130
Sand: fine to coarse-grained	5	202
Sand: fine to coarse-grained	6	403
Sand: fine to coarse-grained	10	443
Sand: fine to coarse-grained	<b>76</b>	500
Sand: fine to coarse-grained	39	571
Sand: fine to coarse-grained	12	593
Sand: fine to coarse-grained	29	669
Sand: fine to coarse-grained	17	714
Sand: fine to coarse-grained	<b>44</b>	786
Sand: fine to coarse-grained	14	869

# WASHINGTON COUNTY

Location: 2.8 mi. north of Highway 24 at Davisboro and 0.7 mi. west of north-south dirt road, near	Well No.: GGS 152 Elev.: 392
,	Ellev., 552
storage shed	
Owner: Georgia Forest Service	
Driller: Layne-Atlantic Company	
Drilled: May 1948	
	Thickness Depth (feet) (feet)

# Upper Eocene: Jackson Group: Barnwell Formation:

Clay: brick-red, very sandy, limonitic; fragments of residual		
limestone	33	33

		Thickness (feet)	Depth (feet)
	No samples	17	50
	Sand: fine to medium-grained, much coarser-grained at depth, angular; some clay, gray to cream to pink, and scattered fragments of residual limestone	47	97
	Sand: fine to coarse-grained; marl, yellowish-green, somewhat fissile, sandy, fossiliferous (macroshells, echinoid and bryo- zoan remains, Ostracods, and Foraminifera)		103
	Nonion advena, Nonion inexcavatus, Valvulineria jackson- ensis, Cibicides lobatulus at 97-103.		
	Limestone: gray to yellow, dense, somewhat saccharoidal and crystalline (in texture), very sandy, fossiliferous (macro- shells, echinoid and bryozoan remains)	2	105
	Sand: fine to coarse-grained, angular; some marl, cream to yellowish-green to red (mottled), fossiliferous (macroshells and some microfossils)		153
	Clay: yellowish-green, noncalcareous, fissile, somewhat ben- tonitic	28	181
	Sand: fine to coarse-grained; some clay, yellowish-green to red (mottled), sandy	24	205
	Limestone: gray, dense, saccharoidal, very sandy, sparsely phosphatic, fossiliferous (fragments, casts and molds of megafossils)	14	219
τ	Jpper Cretaceous: Tuscaloosa Formation:		
	Kaolin: white to gray to pink (mottled), micaceous	47	266
	Sand: coarse-grained, angular, limonitic	260	526
	Summary:		
	Jpper Eocene (Barnwell formation)		219
τ	Jpper Cretaceous (Tuscaloosa formation)	307	526
	Potential Water-Bearing Zones:		

Limestone	14	219
Sand: coarse-grained	260	526

# **Remarks:**

Overall quality of samples for this well is poor. Delineation of water-bearing sands below depth of 266 feet is not feasible.

WASHINGTON COUNTY

•	ABILLI		UNII
Location: 12 mi. northwest of Sandersville Owner: No. 1 Lillian-B Driller: Middle Georgia Oil and Gas Company	Well No.:	GGS 223	
Drilled: January 1921		Thickness (feet)	Depth (feet)
No samples		300	300
In Upper Cretaceous: Tuscaloosa Formation:			
Kaolin: white to cream, sandy, micaceous		18	318
Sand: somewhat indurated, fine to coarse-grained, a arkosic			323
Clay: yellow to light-tan, micaceous, very sandy		. 5	328
Kaolin: light-gray, micaceous, very sandy		. 12	340
Clay: tan to olive-green, very sandy, micaceous			345
Kaolin: light-gray to pink (mottled), very sandy, mica	iceous	5	350
No samples		. 10	360
Clay: reddish-brown, highly micaceous, sandy			365
Kaolin: cream, very sandy, highly micaceous		. 13	378
No samples	·	. 3	381
Kaolin: cream, very sandy, highly micaceous		. 11	392
Basement Complex (Undifferentiated):			
Clay: light-gray to yellowish-green, sandy, highly mi flakes of biotite			395
Crystalline rock <sup>1</sup>		. ?	?
Summary:			
No samples			300
In upper Cretaceous (Tuscaloosa formation)			392 395
Basement complex (undifferentiated)		. 3	000

#### **Potential Water-Bearing Zones:**

None observed in interval covered by available samples.

<sup>&</sup>lt;sup>1</sup>Unweathered biotite gneiss(?) in sample which apparently was derived below the depth of 392-395, the last sample carrying depth identification. Sample 392-395 appears to be weathered biotite gneiss(?).

#### WASHINGTON COUNTY

Thickness Depth<sup>1</sup>

Location: 12.7 mi. west of Sandersville via Highway	Well No.: GGS 433	
24 and 0.9 mi. north of Highway 24 at quarry	Elev.: 318	
Owner: Chemical and Minerals Corporation		
Driller: Bostick Drilling Company		
Drilled: May 1955		

	(feet)	(feet)
No samples	30	30
In Upper Cretaceous: Tuscaloosa Formation:		

#### 

#### Summary:

No samples	30	30
In upper Cretaceous (Tuscaloosa formation)	290	320

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	<b>24</b>	128
Sand: fine to coarse-grained	20	176
Sand: fine to coarse-grained	16	208
Sand: coarse-grained	20	290
Sand: coarse-grained	15	311

#### Remarks:

Overall quality of samples somewhat poor.

#### WASHINGTON COUNTY

Location: In TennilleWell No.:Owner: City of TennileElev.: 46		
·	Thickness (feet)	Depth <sup>2</sup> (feet)
No samples		55
In Upper Eccene: Jackson Group: Barnwell	Formation:	
Clay: olive-green to tan, very sandy, limoni of residual limestone	-	55
<sup>1</sup> Average elevation based on Georgia State Highway <sup>2</sup> Spot samples at depths listed in log.	Maps.	

	Thickness (feet)	Depth (feet)
Limestone: white, sandy; sand, coarse-grained, subrounded grains	?	90
Sand: fine to medium-grained, angular, fossiliferous (some macroshells); some clay, yellowish-green	?	150
Clay: yellowish-green, sandy, finely disseminated phosphatic grains, fossiliferous (echinoid and bryozoan remains, Ostra- cods, and Foraminifera)		245
Siphonina jacksonensis, Valvulineria jacksonensis, Nonion advena, Cibicides cf. C. refulgens, Cibicides lobatulus at 245.		

#### Summary:

No samples	55	55
In upper Eocene (Barnwell formation)	190	245

# **Potential Water-Bearing Zones:**

None observed in samples available for this well.

### WAYNE COUNTY

	Elev.: 73	/ell No.: GGS 52 lev.: 73 (derrick floor)	
Drilled: December 1944	Thickness (feet)	Depth (feet)	
No samples		74	
In Miocene (Undifferentiated):			
Sand: fine to coarse-grained, angular, phosphatic; limestor gray to cream, dense (calcitized), sandy, phosphatic, foss iferous (molds and impressions of macroshells)	sil-	463	
Sand: as above; clay, dark-green, sandy, fossiliferous (mac shells and fish teeth)		494	
Sand: fine to coarse-grained, phosphatic; limestone, whi sandy	•	523	
Sand: fine to coarse-grained, phosphatic; dolomitic limeston light-brown, saccharoidal, phosphatic		680	

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		431
Т	hickness (feet)	Depth (feet)
Oligocene (Undifferentiated):		,
Sand and limestone: as above; limestone, light-gray, nodular, dense (calcitized), fossiliferous (some Foraminifera)	45	725
Quinqueloculina sp., $Pyrgo$ sp. at 680-710. Dictyoconus <sup>1</sup> sp. at 710-725.		
Limestone: cream, fossiliferous; some dolomitic limestone, as above	14	739
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream to light-gray, massive, dense (much calci- tized), fossiliferous (macroshells, bryozoan remains, and some Foraminifera)	94	833
Asterocyclina nassauensis, Gypsina globula at 756-771. Pseudophragmina flintensis, Operculinoides floridensis at 771-787.		
Limestone: as above; some dolomitic limestone	62	895
Middle Eocene: Claiborne Group (Undifferentiated):		
Sand: fine to coarse-grained, and some dolomitic limestone, as above	88	983
No samples	99	1,082
Dolomitic limestone: brown, saccharoidal	<b>54</b>	1,136
Dolomitic limestone: as above; some limestone, light-gray, sac- charoidal, granular (in texture)	16	1,152
No samples	31	1,183
Limestone: light-gray, somewhat granular (in texture), finely disseminated glauconite, fossiliferous	167	1,350
Asterocyclina monticellensis at 1183-1214. Lepidocyclina (Polylepidina) antillea at 1245-1255.		
Sand: fine to coarse-grained, phosphatic; interbedded lime- stone, cream, somewhat massive	280	1,630
Sand: as above; dolomitic limestone, light-brown, saccharoidal, cherty	. 77	1,707
Limestone: cream, granular (in texture), dense (much calci- tized), cherty	243	1,950
Asterocyclina monticellensis common at 1857-1873.		

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

	Thickness (feet)	Depth (feet)
Dolomitic limestone: light-brown, saccharoidal; some lime-		(,
stone, as above	40	1,990
Dolomitic limestone: as above, but coarsely glauconitic	. 5	1,995
Dolomitic limestone: as above; some indurated sand, fine- grained, abundantly glauconitic; interbedded clay, pale- green, fissile, silty, gypsiferous, finely glauconitic, abun- dantly and coarsely glauconitic and fossiliferous at depth	125	2,120
Sand: fine to coarse-grained, phosphatic	85	2,205
Lower Eocene: Wilcox Group (Undifferentiated):		
Sand: fine to coarse-grained, glauconitic; interbedded lime- stone, white, dense (much calcitized), sandy, coarsely glau- conitic, fossiliferous (molds and fragments of macroshells)	165	2,370
$Eponides\ dorfi,\ Valvulineria\ wilcoxensis\ { m at}\ 2205-2212.$		
Marl: dark-gray, silty, micaceous, carbonaceous, fossiliferous (some Foraminifera)	175	2,545
Eponides dorfi, Valvulineria scrobiculata, Cibicides howelli at 2473-2545.		
Paleocene: Midway Group: Clayton Formation:		
Sand: somewhat indurated at certain horizons, fine-grained, glauconitic; interbedded marl, dark-gray to black, fissile, carbonaceous, finely micaceous, fossiliferous (some Fora- minifera)	90	2,635
Eponides lotus, Polymorphina cushmani, Siphonina prima, Cibicides praecursorius, Cibicides howelli at 2545-2550.		
Limestone: cream, dense (much calcitized), nodular (in tex- ture), somewhat saccharoidal, fossiliferous (molds of mac- roshells, bryozoan remains, and occasional Ostracods and		
Foraminifera)	24	2,659
Sand: somewhat indurated at certain horizons, fine-grained, micaceous, glauconitic	121	2,780
Sand: fine-grained, glauconitic; interbedded marl, black, fis- sile, carbonaceous, finely micaceous, somewhat fossiliferous (Foraminifera)	120	<b>2,</b> 900
Upper Cretaceous: Post-Tuscaloosa (Undifferentiated):		
Marl: bluish-gray to brown, sandy, micaceous, glauconitic,		
foggiliforoug (meanachalla Ostrogoda and Eggeniiforo)	005	0 202

fossiliferous (macroshells, Ostracods,		625	3,525
--	--	-----	-------

Globotruncana sp., Guembelina sp. at 2900-2903.

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		433
	Thickness (feet)	Depth (feet)
Marl: as above, but much sandier		4,065
Anomalina sp., Globorotalia micheliniana at 3525-3540. Planulina cf. P. taylorensis at 3540-3555. Kyphopyxa christneri at 3612-3626. Vaginulina texana at 3693-3708.		
Sand: fine to medium-grained, somewhat indurated at certain horizons, glauconitic, phosphatic, abundantly micaceous	65	4,130
Tuscaloosa Formation:		
Sand: fine to medium-grained, indurated, finely glauconitic, very micaceous, fossiliferous (macroshells); interbedded shale, greenish to dark-gray, fissile, finely micaceous	445	4,575
Basement Complex (Undifferentiated):		
Quartzite?	50	4,625
Summary:		
No samples	74	74
In Miocene (undifferentiated)	606	680
Oligocene (undifferentiated)	59	739
Upper Eocene (Ocala limestone)	156	895
Middle Eocene (Claiborne group, undifferentiated)		2,205
Lower Eocene (Wilcox group, undifferentiated)		2,545
Paleocene (Clayton formation)		2,900
Upper Cretaceous (post-Tuscaloosa, undifferentiated)	1,230	4,130

# **Potential Water-Bearing Zones:**

Upper Cretaceous (Tuscaloosa formation)

Basement complex (undifferentiated)

4,575

4,625

**445** 

Limestone	180	860
Sand: fine to coarse-grained	61	956
Sand: fine to coarse-grained	280	1,630
Sand: fine to coarse-grained	70	2,370
Sand: fine-grained <sup>1</sup>	65	<b>2,</b> 635

<sup>&</sup>lt;sup>1</sup>Probably contains salt water.

# WAYNE COUNTY

	WAINE CO	
Location: 0.5 mi. southwest of Mt. Pleasant Owner: No. 1 Southern Pines Products Company Driller: Hughes Specialty Well Drilling Company Drilled: September 1906	Well No.: GG Elev.: 59	S 96
	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, subangular, finely disse nated phosphatic grains; interbedded clay, dark-gray, si lignitic, micaceous, fossiliferous at certain levels (mac shells and echinoid remains)	lty, cro-	40
Sand: coarse-grained, subangular, sparsely phosphatic		44
In Miocene: Duplin Marl:		
Marl: gray to pale-green, somewhat indurated and san fossiliferous (megafossils, echinoid remains, and Ostraco		71
Shell bed prominent at 69-71.		
Hawthorn Formation:		
Clay: dark-green, rather tough, somewhat indurated, sand	y 55	126
No samples		147
Sand: fine-grained		160
Sand: fine to coarse-grained, phosphatic		220
Clay: dark-green, sandy, phosphatic		285
Sand: fine to coarse-grained, phosphatic; interbedded cl dark-green, sandy, phosphatic		400
Sand: fine to coarse-grained, phosphatic; interbedded lin stone, white, dense, sandy		480
Dolomitic limestone: light-brown, saccharoidal, sandy, ph phatic		510
Oligocene (Undifferentiated):		•
Limestone: light-gray, dense (much calcitized), crystall nodular, fossiliferous (Foraminifera)		560

Rotalia byramensis var. at 510-523.

	Thickness (feet)	Depth (feet)
Summary:		
Pliocene to Recent (undifferentiated)		44
In Miocene (Duplin marl)		71
Miocene (Hawthorn formation)		510
Oligocene (undifferentiated)		560
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		<b>220</b>
Limestone	50	560
. W.	AYNE COU	JNTY

Location: 1500 ft. south of Altamaha River at Doctortown	Well No.: GGS 262
Owner: No. 1 Rayonier Corporation	Elev.: 100
Driller: Layne-Atlantic Company	
Drilled: January 1952	
	Thickness Depth (feet) (feet)

# Pliocene to Recent (Undifferentiated):

Sand: medium-grained to coarse-grained at depth, subangu- lar to subrounded, arkosic; interbedded clay (or kaolin?), white, sandy, micaceous	40	40
Miocene (Undifferentiated):		
Clay: pale-brownish-gray to dark-brown at depth, somewhat mottled (with red streaks), sandy, micaceous	15	55
Clay: dark to pale green, sandy, phosphatic; beds of sand	305	360
Sand: fine to coarse-grained, phosphatic; interbedded lime- stone, white, dense (much calcitized), sandy, phosphatic	140	500

Dolomitic limestone: brown, saccharoidal, sandy, phosphatic	25	525
No samples	5	530

# In Oligocene (Undifferentiated):

Limestone: gray, dense (much calcitized), nodular, fossilifer-		
ous (some Foraminifera)	15	545
Operculinoides sp. at 530-545.		

Upper Eocene: Jackson Group: Ocala Limestone:	Thickness (feet)	Depth (feet)
Opper Locene. Jackson Group. Ocara Linnescone.		
Limestone: white, dense (much calcitized), fossiliferous (bry- ozoan remains, macroshells, and Foraminifera)	305	850
Gypsina globula, Asterocyclina nassauensis at 545-555.		
Camerina striatoreticulata at 710-715.		
Amphistegina pinarensis var. at 720-725.		
Middle Eocene: Claiborne Group (Undifferentiated):		
Dolomitic limestone: brown, saccharoidal		900
Summary:		
Pliocene to Recent (undifferentiated)	40	40
Miocene (undifferentiated)		525
No samples	5	530
In Oligocene (undifferentiated)	15	545
Upper Eocene (Ocala limestone)	305	850
Middle Eocene (Claiborne group, undifferentiated)	50	900

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	52	187
Sand: fine to coarse-grained	41	310
Sand: fine to coarse-grained	140	500
Limestone	270	815

# WAYNE COUNTY

Location: East side of U.S. Highway 25, south side of We	ell No.: GGS	S 297
Altamaha River, at Rayonier Plant Ele	ev.: 100	
Owner: No. 1 Rayonier Inc.		
Driller: Layne-Atlantic Company		
Drilled: April 1952		
	Thickness (feet)	Depth (feet)

# Pliocene to Recent (Undifferentiated):

Sand: fine-grained, finely disseminated phosphatic grains;		
interbedded kaolin, white, somewhat sandy	38	3 <b>8</b>
No samples	120	158
In Miocene (Undifferentiated):		
Sand: fine to coarse-grained, rounded, phosphatic	60	218
Clay: dark-green, sandy	42	260

	Thickness (feet)	Depth (feet)
No samples		310
Sand: fine to coarse-grained, phosphatic		370
Sand: as above; interbedded dolomitic limestone, light-brown, saccharoidal, sandy, phosphatic		450
No samples		475
Limestone: white, dense (much calcitized), sandy, phosphatic, fossiliferous (fragments and molds of megafossils)	16	491
No samples	104	595
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: cream to white, somewhat saccharoidal (much cal- citized), fossiliferous (bryozoan remains and Foraminifera)	230	825
Pseudophragmina flintensis, Gypsina globula at 595-605. Asterocyclina nassauensis at 605-615. Amphistegina pinarensis var. at 765-775.		
Middle Eocene: Claiborne Group (Undifferentiated):		
Dolomitic limestone: light-brown, saccharoidal		905
Limestone: light-gray, rather dense (calcitized), fossiliferous (Foraminifera)	40	945
Miliolidae abundant at 905-945.		
No samples	40	985
Dolomitic limestone: light-brown to black, saccharoidal	7	992
Summary:		
Pliocene to Recent (undifferentiated)		38
No samples		158
In Miocene (undifferentiated)	333	491
No samples		595
In upper Eocene (Ocala limestone)		825
Middle Eocene (Claiborne group, undifferentiated)	167	992
Potential Water-Bearing Zones:		

Sand: fine to coarse-grained	60	218
Sand: fine to coarse-grained	60	370
Limestone	230	825

# WAYNE COUNTY

Owner: City of Odum Driller: M. M. Gray		No.: GGS 454 .: 155 <sup>1</sup>	
Drilled: 1955		nickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):			
Sand: fine to coarse-grained, angular, arkosic; interbedd clay, light-gray to pale-green, sandy		120	120
Mottled sandy clay at 0-10.			
Coarse-grained arkosic sand at 60-70.			
Tubular worm borings(?) prominent at 80-100.			
Fine to coarse-grained, angular, arkosic sand at 100-120.			
Miocene (Undifferentiated):			
Clay: pale-green, sandy, phosphatic; interbedded sand, fine coarse-grained, phosphatic; clay, pale-green, sandy, ph phatic; dolomitic limestone, light-brown, saccharoid sandy, phosphatic; and limestone, white, sandy, coars phosphatic, fossiliferous (macroshells)	os- lal, ely	470	590
Dolomitic limestone, light-brown, sandy, phosphatic at 3 350, 400-430, 490-510, and 580-590.	00-		
Oligocene (Undifferentiated):			
Limestone: gray, extremely dense (highly calcitized), no lar, fossiliferous (some Foraminifera)		50	640
Rotalia byramensis var., Lepidocyclina sp. at 610-620. Miliolidae common, Dictyoconus² sp. at 620-630.			
Upper Eocene: Jackson Group: Ocala Limestone:			
Limestone: as above, very fossiliferous (macroshells, br zoan remains, and Foraminifera)	•	70	710
Operculinoides sp. at 640-650. Operculinoides cf. O. floridensis at 660-670. Operculinoides sp. abundant, Asterocyclina nassauen Pseudophragmina flintensis, Gypsina globula at 670-680.	sis,		
<sup>1</sup> Average elevation based on Georgia State Highway Maps.			

<sup>&</sup>lt;sup>1</sup>Average elevation based on Georgia State Highway Maps. <sup>2</sup>Reworked(?) fossil of middle Eocene age.

Summary:	(feet)	(feet)
Pliocene to Recent (undifferentiated)	120	120
Miocene (undifferentiated)	470	590
Oligocene (undifferentiated)	50	640
Upper Eocene (Ocala limestone)	70	710

# Potential Water-Bearing Zones:

Sand: fine to coarse-grained	10	70
Sand: fine to coarse-grained	20	120
Sand: fine to coarse-grained	50	490
Limestone	110	710

# WAYNE COUNTY

Location: 0.75 mi. south of Screven city limits, west side of Highway 38	Well No.: GGS 466 Elev.: 118
Owner: No. 1 Lindsey Grace Driller: Layne-Atlantic Company Drilled: 1955	
	Thickness Depth (feet) (feet)

(1000)	(1000)
5	5
10	15
. 30	45
. 30	75
175	250
40	290
. 103	393
123	516
. 84	600
20	620
	- 5 - 10 - 30 - 30 - 175 - 40 - 103 - 123 - 84

Thickness Depth

In Oligocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: cream, rather massive (calcitized), fossilifero	ous	
(Foraminifera)		700
Dictyoconus <sup>1</sup> sp., Quinqueloculina sp. at 620-640.		
Summary:		
Pliocene to Recent (undifferentiated)		75
Miocene (undifferentiated)		600
No samples In Oligocene (undifferentiated)		620 700
		100
Potential Water-Bearing Zones:		
Sand: coarse-grained		290
Limestone		700
	WAYNE COU	INTY
Location: In Jesup	Well No.: GG	S 555
	Elev.: 100	
Driller: Bailey Drilling Company Drilled: May 1958		
Difficu. May 1000	Thickness	Depth
	(feet)	(feet)
Pliocene to Recent (Undifferentiated):		
Sand: fine to medium-grained, angular, arkosic, phospha		
(finely disseminated); interbedded clay, dark-gray, sil		
lignitic, micaceous		74
Miocene (Undifferentiated):		
Sand: coarse-grained, subangular; some clay, yellowish		
dark-green, blocky, sandy, phosphatic at depth	21	95
Clay: yellowish to dark-green, blocky, sandy, phosphatic	190	285
Light-brown phosphatic pebbles at 95-105.		
Jet-black phosphatic pebbles at 141-152.		
Sand: coarse-grained, subangular, phosphatic; some clay, above		353
Dolomitic limestone at 305-323.		
Clay: as above		414

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

	Thickness (feet)	Depth (feet)
Sand: coarse-grained, subangular, phosphatic; interbedded dolomitic limestone, light-brown, saccharoidal, sandy, phos- phatic	61	475
-	01	410
Dolomitic limestone: as above; interbedded thin tongues of sand and clay, as above	61	536
Limestone: light-gray, dense, sandy, phosphatic, fossiliferous (echinoid remains and macroshells)	40	576
Oligocene (Undifferentiated):		
Limestone: cream, rather massive, nodular, much calcitized and recrystallized, porous, fossiliferous (casts and molds chiefly of Gastropods, some echinoid and bryozoan remains, and Foraminifera)	50	626
Quinqueloculina sp. at 576-586.		
Quinqueloculina sp., Rotalia sp., Gypsina globula <sup>1</sup> , Dictyoconus <sup>1</sup> sp. at 586-596.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: as above, but lighter-colored at depth, fossilifer- ous (bryozoan remains and Foraminifera)	69	695
Operculinoides sp., Operculinoides floridensis, Asterocyclina nassauensis, Pseudophragmina flintensis, Gypsina globula at 626-636.		
~		

# Summary:

Pliocene to Recent (undifferentiated)	74	<b>74</b>
Miocene (undifferentiated)	502	576
Oligocene (undifferentiated)	50	626
Upper Eocene (Ocala limestone)	69	695

# **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	68	353
Sand: fine to coarse-grained	61	414
Limestone	159	695

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

# 

	WEBSTER CO	UNTY
	Well No.: GGS Elev.: 586 unty road in roa	
Drilled: October 1952	Thickness (feet)	Depth (feet)
Upper Cretaceous: Providence Sand:		
Clay: bluish-gray to brick-red (somewhat mottled), sandy, limonitic	•	30
Sand: fine to coarse-grained, very angular, arkosic; in bedded clay, gray to red (mottled), micaceous, sandy		175
Ripley Formation:		
Clay: dark bluish-gray to black, somewhat fissile, lign micaceous, sandy		190
Summary:		
Upper Cretaceous (Providence sand)	175	175
Upper Cretaceous (Ripley formation)		180
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained		114
Sand: fine to coarse-grained		138
Sand: fine to coarse-grained		152
Sand: fine to coarse-grained		166
Remarks:		
Owing to ground-water leakage (springs) all sands list sources of ground water may be dry.	ed above as p	otential

#### WEBSTER COUNTY

6

146

Driller: Southeastern Drilling Company Drilled: March 1956		
	Thickness (feet)	Depth (feet)
Middle Eccene: Claiborne Group: Lisbon Formation:		
Sand: argillaceous, brick-red, fine to coarse-grained, angular, limonitic	40	40
Clay: olive-green to red (mottled), blocky, sandy	20	60
Tallahatta Formation:		
Sand: fine to coarse-grained, angular, massive; interbedded clay, gray to red (mottled), micaceous, sandy	108	168
Lower Eocene: Wilcox Group (Undifferentiated):		
Clay: black, fissile, carbonaceous, micaceous, coarsely glau- conitic at depth	18	18
Paleocene: Midway Group: Clayton Formation:		
Limestone: light-gray, crystalline, coarsely but sparsely glau- conitic, fossiliferous (casts and molds of megafossils, bryo- zoan remains, and Foraminifera)	9	19
Discorbis midwayensis, Eponides lotus, Cibicides praecur- sorius, Cibicides newmanae at 190-195.		
Upper Cretaceous: Providence Sand:		
Clay: yellowish-green to red (mottled), micaceous, sandy; in- terbedded sand, fine to coarse-grained, angular, arkosic	35	230
Summary:		
Middle Eocene (Lisbon formation)		6
Middle Eocene (Tallahatta formation) Lower Eocene (Wilcox group, undifferentiated)		16 18
Paleocene (Clayton formation)		19
Upper Cretaceous (Providence sand)		230
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	14	108
Sand, find to cooke mained		1 4

Sand: fine to coarse-grained

#### **Remarks:**

All potential water-bearing sands above depth of 200 feet are probably dry due to local rugged topography and ground-water leakage (springs). Above well should have been drilled deeper in order to penetrate the underlying Providence sand which is known to contain good water-bearing sands.

#### WEBSTER COUNTY

	Well I Elev.:	No.: GGS 535	559
Driller: Southeastern Drilling Company		Thickness (feet)	Depth (feet)
Residuum:			
Clay: brick-red, very sandy, limonitic		. 10	10
Clay: bluish-gray to yellow to tan to dark-red (mottl sandy, limonitic		. 20	30
Middle Eocene: Claiborne Group: Tallahatta Formation:			
Sand: fine to coarse-grained, coarser-grained with depth, angular, sparsely phosphatic		. 70	100
Lower Eocene: Wilcox Group (Undifferentiated):			
Marl: dark-gray to black, lignitic, pyritiferous, micace glauconitic; some sand, fine to coarse-grained, angu somewhat arkosic	ılar,		130
Limonite prominent at 100-110.			
Glauconite abundant at 110-120.			
Sand: fine to coarse-grained, angular; some marl, as about	ve	. 10	140
Paleocene: Midway Group: Clayton Formation:			
Clay: light-gray, blocky, carbonaceous, micaceous, silty		. 10	150
Clay: black, fissile, carbonaceous, micaceous (finely diss nated); limestone, cream, dense, crystalline, coarsely g conitic, pyritiferous, fossiliferous (fragments, casts molds of megafossils, echinoid and bryozoan remains, twoods and Ecomonicipant agend age above	lau- and Os-	. 10	160
tracods, and Foraminifera); sand, as above			180
Eponides lotus, Anomalina midwayensis, Discorbis		_ 20	100
wayensis, Cibicides howelli at 160-170.			

Well	LOGS	$\mathbf{OF}$	THE	COASTAL	Plain	OF	GEORGIA
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	Thickness (feet)	Depth (feet)
Limestone: light-gray, dense, crystalline, glauconitic, fossil- iferous (fragments, casts and molds of megafossils, echi- noid and bryozoan remains, Ostracods, and Foraminifera)	10	190
Limestone: cream, dense, crystalline, glauconitic, sandy, sandier with depth, fossiliferous (casts and molds of mega-		
fossils)	15	205
Sand: fine to coarse-grained, angular	10	215
Upper Cretaceous: Providence Sand:		
Sand: fine to coarse-grained, angular, arkosic; some clay,		

Sand. The to coarse-granicu, angular, arkosic, some clay,		
gray to red (mottled), sandy, micaceous	15	230
gray to red (motored), sandy, micaceous	10	400

Mica flakes prominent at 220-230.

#### Summary:

Residuum	30	30
Middle Eocene (Tallahatta formation)	70	100
Lower Eocene (Wilcox group, undifferentiated)	40	140
Paleocene (Clayton formation)	75	215
Upper Cretaceous (Providence sand)	15	230

#### **Potential Water-Bearing Zones:**

Sand: fine to coarse-grained	10	140
Limestone	45	205
Sand: fine to coarse-grained	10	215

#### WHEELER COUNTY

Location: 3.4 mi. northwest of Southern R.R. Depot at Well No.: GGS 92 Scotland, west side of north-south county road at Elev.: 243 dwelling Owner: No. 1 H. G. Samples Driller: J. L. Clegg Drilled: 1943 Thickness Depth (feet) (feet)

# Miocene (Undifferentiated):

Clay: mottled, sandy, limonitic	40	40
Clay: light-gray, sandy	65	105
Sand: fine to coarse-grained, angular	73	178
Clay: yellowish-green, sandy	76	254

Oligocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Limestone: white, dense, nodular, much calcitized, fossilifer- ous (some Foraminifera)		288
Rotalia mexicana var. at 254-274.		
Summary:		
Miocene (undifferentiated) Oligocene (undifferentiated)		254 288
Potential Water-Bearing Zones:		
Limestone		288
WHI	EELER CO	UNTY
	No.: GGS .: 190	336
	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: brick-red, very sandy, limonitic	20	20
Clay: tan to purple to red (mottled), sandy, limonitic	10	30
Sand: fine-grained, angular, phosphatic (finely disseminated grains); some clay, yellowish-green, blocky, sandy		60
Clay: light-brown, sandy	20	80
Sand: fine-grained to coarser-grained at depth, angular, arkosic		130
Clay: light-brown to yellowish-green, blocky, sandy	60	190
Clay: as above but much sandier, phosphatic at depth	40	230
Brown phosphatic pebbles at 210-220.		
Clay: as above; interbedded limestone, white, sandy		320
White sandy limestone prominent at 240-250.		
Clay: dark-green, blocky, phosphatic, sandy	20	340
Sand: fine-grained, angular; some clay, as above	10	350
Sand: as above; some limestone, light-brown, very sandy, phosphatic, fossiliferous (macroshells)		360

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA	L	447
	Thickness (feet)	Depth (feet)
Oligocene (Undifferentiated):	(1000)	(1000)
Limestone: light-gray to somewhat reddish-brown at depth, massive, dense, somewhat nodular, much calcitized, cherty at certain levels, sandy, sparsely phosphatic near top, fos- siliferous (casts and molds of megafossils, some echinoid and bryozoan remains, and Foraminifera)	90	450
Rotalia mexicana var. at 360-370.		
Gypsina globula <sup>1</sup> , Lepidocyclina <sup>1</sup> sp. at 400-410.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: light-gray, much calcitized, crystalline, somewhat granular (in texture), much softer than limestone above, fossiliferous (abundant bryozoan remains and some Fora- minifera)	230	680
Robulus arcuato-striatus var., Nonion planatus, Eponides jacksonensis, Rotalia mexicana var., Asterigerina subacuta, Lepidocyclina sp. at 450-460.		
Operculinoides floridensis and bryozoan remains common to abundant at 490-500.		
Asterocyclina nassauensis at 570-580.		
Limestone: cream, much calcitized, granular and somewhat loosely consolidated, dolomitized at certain horizons, fossili- ferous (bryozoan remains and Foraminifera); some mas- size limestone, gray to white, nodular, fossiliferous (macro- shells and bryozoan remains)	180	860
Camerina striatoreticulata at 680-690.		
Amphistegina pinarensis var., Pseudophragmina flintensis at 690-700.		
Dolomitic limestone prominent at 710-720.		
Operculina mariannensis at 730-740.		
Dolomitic limestone prominent at 820-830.		
Middle Eocene: Claiborne Group (Undifferentiated):		
Sand: fine to coarse-grained, angular; some limestone, as above	40	900
Sand: fine to medium-grained, angular, somewhat argilla- ceous, indurated at certain levels, phosphatic, micaceous; interbedded marl, light-gray, silty, glauconitic, micaceous,		
<sup>1</sup> Reworked(?) fossil of middle Eccene age.		

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	Thickness (feet)	Depth (feet)
fossiliferous (fish teeth, Ostracods, and Foraminifera); limestone, light-gray, dense, massive, crystalline, fossilifer- ous (macroshells and some bryozoan remains)	<b> 2</b> 40	1,140
Glauconite common at 1020-1030.		
Macroshells abundant at 1100-1110.		
Sand: fine to medium-grained, angular, coarsely glauconitic		1,200
Marl: dark-gray, silty, carbonaceous, glauconitic, micaceous, fossiliferous (Ostracods and Foraminifera)	. 130	1,330
In Lower Eocene and Paleocene (Undifferentiated):		
Marl: dark-gray to black, fissile, carbonaceous, micaceous, abundantly glauconitic		1,350
Glauconite abundant at 1330-1340.		
Limestone: gray, dense, crystalline, glauconitic, fossiliferous (fragments, casts and molds of megafossils); some marl and sand, as above	- 100	1,450
Sand: fine to medium-grained, angular, phosphatic, fossili- ferous (macroshells at certain horizons)	. 100	1,550
Sand: fine to medium-grained, angular, phosphatic; interbed- ded marl, dark-gray to black, fissile, carbonaceous, mica- ceous; limestone, light-gray, crystalline (in texture), sandy		1,780
Upper Cretaceous: Providence and Ripley (Undifferentiated):		
Marl: dark-gray, sandy, very micaceous, fossiliferous (macro- shells, Ostracods, and Foraminifera)	- 400	2,180

Gaudryina rudita, Anomalina pseudopapillosa at 1790-1800.

#### Summary:

Miocene (undifferentiated)	360	360
Oligocene (undifferentiated)	90	450
Upper Eocene (Ocala limestone)	410	860
Middle Eocene (Claiborne group, undifferentiated)	470	1,330
In lower Eocene and Paleocene (undifferentiated)	450	1,780
Upper Cretaceous (Providence and Ripley, undifferentiated)	400	2,180²

# Potential Water-Bearing Zones:

Limestone	500	860
Sand: fine to coarse-grained	40	900
Sand: fine to medium-grained	60	1,200
Limestone	50	1,440

<sup>2</sup>Well not examined below 2180.

#### WHEELER COUNTY

Location: 6.2 mi. northeast of No. 1 Jordan Heirs (oil Well No.: GGS 337 test) at tenant house, southwest quarter of Land Lot 87. 6th Land District Owner: No. 1 Emmett Joyce Driller: Dixie Well Drilling Company Drilled: 1953 Thickness Depth (feet) (feet) No samples 100 100 In Miocene (Undifferentiated): Clay: light-gray, sandy; sand, fine to medium-grained, angular\_ 50150Sand: fine to medium-grained, angular, gray phosphatic pebbles 20 170 Clay: vellowish-green, sandy: fragments of limestone, white, rather dense. sandy 110 280Sand: fine to medium-grained, subangular, phosphatic, fossiliferous (a coquina at depth) 65 345 Oligocene (Undifferentiated): Limestone: light-gray, dense, crystalline, somewhat nodular, sandy, sparsely phosphatic, fossiliferous (some macroshells, bryozoan remains, Ostracods, and Foraminifera) 105 450 Quinqueloculina sp. at 340-350. Rotalia mexicana var. at 350-360. Asterigerina subacuta, Operculinoides sp. at 370-380. Upper Eocene: Jackson Group: Ocala Limestone: Limestone: cream, considerably calcitized, granular, fossiliferous (some macroshells, echinoid and bryozoan remains and Foraminifera) 160 610 Camerina striatoreticulata, Lepidocuclina sp. at 450-460. Camerina striatoreticulata common at 460-470. Lepidocyclina ocalana at 580-590. Bryozoan remains common at 590-610. Summary:

# No samples100100In Miocene (undifferentiated)245345Oligocene (undifferentiated)105450Upper Eocene (Ocala limestone)160610

#### **Potential Water-Bearing Zones:**

Limestone	240	610
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# WILCOX COUNTY

Location: 1.5 mi. north of Pitts, west side of county road Owner: No. 1 A. C. Shell Driller: W. B. Graham Drilled: January 1947		No.: G( .: 405	GS 68
	1	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):			
Clay: bluish-gray to red (mottled), sandy, limonitic; in bedded sand, fine to coarse-grained, angular, arkosic		140	140
Oligocene (Undifferentiated):			
Limestone: white, dense, crystalline, cherty, fossilifer (some Foraminifera)		. 10	150
Rotalia mexicana var. at 140-150.			
Summary:			
Miocene (undifferentiated)		140	140
Oligocene (undifferentiated)		10	150
Potential Water-Bearing Zones:			
Limestone		10	150
Location: Approximately 3 mi. southeast of Pitts, east side of county road at dwelling Owner: No. 1 H. A. Dorsey Driller: W. B. Graham Drilled: Japuery, 1947	Well	C <b>OX CO</b> No.: GG : 395	
Drilled: January 1947	J	fhickness (feet)	Depth (feet)
Miocene (Undifferentiated):			
Clay: light-gray to red (mottled), sandy, limonitic		60	60
Clay: yellowish-green, sandy; residual limestone, at depth		95	155
Oligocene (Undifferentiated):			
Limestone: white, dense, crystalline, cherty		19	174

W	ELL	Logs	OF	THE	COASTAL	Plain	OF	GEORGIA	
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	Thickness (feet)	Depth (feet)
Summary:		
Miocene (undifferentiated) Oligocene (undifferentiated)		155 174
Potential Water-Bearing Zones:		
Limestone		174
	WILCOX CO	UNTY
Location:1.5 mi. east of Seville, 300 yd. east of tributary to Alapaha River, north side of Highway 280	Well No.: GG	S 136
Owner: No. 5 U.S. Geological Survey test hole Driller: Scott Brothers Drilled: July 1946		
Difficult Sully 1540	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		10
Clay: yellowish-green, sandy		70
Clay: as above, with fragments of residual limestone		80
Oligocene (Undifferentiated):		
Limestone: white, cherty, fossiliferous (some Foraminifera	ı) 39	119
Rotalia mexicana var. at 100-110.		
Asterigerina sp. at 110-119.		
Summary:		
Miocene (undifferentiated)		80
Oligocene (undifferentiated)		119
Potential Water-Bearing Zones:		
Limestone		119

# WILCOX COUNTY

	Wincoll 60	
Location: Approximately 3.5 mi. south of Pitts Owner: No. 2 A. C. Shell Driller: T. D. Yers	Well No.: GG Elev.: 405	S 142
Drilled: February 1947	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, sandy, limonitic		20
Clay: gray to yellowish-green, sandy		90
Oligocene (Undifferentiated):		
Limestone: white, dense, crystalline, cherty	50	140
Quinqueloculina sp. at 140-150.		
Limestone: white, soft, porous, fossiliferous (some Fo fera)		197
Summary:		
Miocene (undifferentiated) Oligocene (undifferentiated)		90 197
Potential Water-Bearing Zones:		
Limestone	57	197
	WILCOX CO	UNTY
Location: State Fish Hatchery, Bowens Mill	Well No.: GO	
Owner: State (Georgia) Department of Wild Life Driller: Tucker and Woffe		10 0 10
Drilled: July 1953	Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):		
Clay: mottled, very sandy, limonitic	45	45
Clay: light-gray to pale-green, sandy		55
In Oligocene (Undifferentiated):		
Limestone: white, crystalline, much calcitized, cher siliferous (bryozcan remains and some Foraminifer		107
Quinqueloculina sp., Rotalia mexicana var. at 60-75.		

	Thickness (feet)	Depth (feet)
Summary:		
Miocene (undifferentiated)		55
In Oligocene (undifferentiated)		107
Potential Water-Bearing Zones:		
Limestone	42	107

#### WILKINSON COUNTY

Location: In Irwinton	Well No.: GGS 441
Owner: No. 1 William Sites	Elev.: 465 <sup>1</sup>
Driller: Georgia-Florida Well Drilling Company	
Drilled: July 1955	
	ThicknessDepth(feet)(feet)

#### Upper Eocene: Jackson Group: Barnwell Formation:

Clay: brown, sandy, limonitic, and fragments of residual		
limestone	40	40
Marl: yellowish-green, silty, fossiliferous (some Foraminifera)	50	90
Valvulineria jacksonensis at 60-70.		
Limestone: white, somewhat leached, sandy, fossiliferous (macroshells, echinoid and bryozoan remains)	20	110
Upper Cretaceous: Tuscaloosa Formation:		
Kaolin: white, micaceous, somewhat sandy	40	150
Sand: fine to coarse-grained, angular; interbedded clay (or kaclin)	180	330
Summary:		
Upper Eocene (Barnwell formation)	110	110
Upper Cretaceous (Tuscaloosa formation)	180	330
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	150	330

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

# WILKINSON COUNTY

Location: Southwestern part of county near DanvilleWell No. 3Owner: No. 1 Danville Elementary SchoolElev.: 45Driller: Virginia Supply and Well CompanyElev.: 45		29
	hickness (feet)	Depth (feet)
Upper Eocene: Jackson Group: Barnwell Formation:		
Clay: bluish-gray to tan to red (mottled), sandy, limonitic	40	40
Marl: dark-green, silty, sparsely glauconitic	10	50
Marl: light-gray, silty, blocky, glauconitic, fossiliferous (at certain levels macroshells, echinoid and bryozoan remains, and Foraminifera); interbedded limestone, light-gray, dense, crystalline	105	155
Nonion advena at 50-55. Valvulineria jacksonensis, Nonion advena at 80-85.		
Limestone: light-gray, dense, crystalline, sandier at depth, coarsely but sparsely glauconitic, fossiliferous (casts and molds of megafossils and abundant bryozoan remains)	5	160
Middle Eocene: Claiborne Group (Undifferentiated):		
Sand: fine to coarse-grained, angular, phosphatic at depth; some limestone, as above	45	205
Marl: light-gray, silty; some sand, fine to coarse-grained, angular	30	235
Limestone: light-gray, argillaceous, very sandy	5	240
Clay: dark-green to brown, somewhat indurated and fissile, abundantly glauconitic, carbonaceous, micaceous, pyritifer- ous, fossiliferous (rare Foraminifera)	20	260
Sand: coarse-grained, angular, phosphatic, somewhat arkosic	30	290
Sand: as above; some clay, brown, sandy, lignitic	30	320
Summary :		
Upper Eocene (Barnwell formation) Middle Eocene (Claiborne group, undifferentiated)		160 320
Potential Water-Bearing Zones:		
Sand: coarse-grained	30	290

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

Location: Approximately 3.25 mi. southeast of Oakfield,	Well No.: GGS 232
0.1 mi. north of a grain mill at tenant house	Elev.: 250
Owner: No. 1 Will Aultman	
Driller: H. B. Truluck	
Drilled: July 1951	
	Thickness Depth (feet) (feet)

### Residuum:

Clay: dark-brown to black, sandy, lignitic, and residual lime-		
stone	40	40
No samples	10	50

#### In Upper Eocene: Jackson Group: Ocala Limestone:

Limestone: white, calcitized, fossiliferous (macroshells, abun-		
dant bryozoan remains, and some Foraminifera)	30	80
Operculinoides sp. at 50-60.		

Argyrotheca sp. at 70-80.

#### Summary:

Residuum	40	40
No samples	10	50
In upper Eocene (Ocala limestone)	30	80

# Potential Water-Bearing Zones:

Limestone 3	30 8	80
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v	voi	ктн соц	JNTY
		No.: GG	S 456
		Thickness (feet)	Depth (feet)
Miocene (Undifferentiated):			
Clay: mottled, sandy, limonitic		- 50	50
Clay: yellowish-green, sandy		10	60

Sand: fine to coarse-grained, angular\_\_\_\_\_ 10 70

	Thickness (feet)	Depth (feet)
Clay: yellowish-green, sandy; interbedded limestone, white, dense, calcitized, sandy	210	280
Limestone prominent at 160-170.		
In Oligocene (Undifferentiated):		
Limestone: white, somewhat sandy, fossiliferous		300
Rotalia mexicana var. at 280-290.		
<i>Pyrgo</i> sp. at 290-300.		
Summary:		
Miocene (undifferentiated)	280	280
In Oligocene (undifferentiated)	20	300

## **Potential Water-Bearing Zones:**

Limestone	20	300
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#### **Remarks**:

Samples of poor quality.

#### WORTH COUNTY

Location: 0.25 mi. west of town of Red Rock Owner: No. 1 Red Rock Elementary School Driller: W. H. Pierson Drilling Company Drilled: 1955

Well No.: GGS 471 Elev.: 330

30

90

	Thickness (feet)	Depth (feet)
Residuum:		
Clay: mottled, sandy, limonitic	10	10
Clay: olive-green to red (somewhat mottled), carbonaceous, sandy, and fragments of chert	10	20
Clay: as above, with residual limestone	40	60

No samples

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA		457
	Thickness (feet)	Depth (feet)
In Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, dense, crystalline, highly calcitized, fossil- iferous at certain levels (macroshells, bryozoan remains, and some Foraminifera)	155	245
Robulus alato-limbatus, Siphonina jacksonensis, Eponides jacksonensis, Gypsina globula at 90-100.		
Lepidocyclina sp. at 110-120.		
Gypsina globula common at 125-130.		
Limestone: as above, but coarsely glauconitic	15	260
Operculina mariannensis at 255-260.		
Limestone: white, dense, sandy, fossiliferous (macroshells and Foraminifera)	40	300
Amphistegina pinarensis var. at 285-290.		
Sand: fine to medium-grained, angular	15	315

# Summary:

Residuum	60	60
No samples	30	90
In upper Eocene (Ocala limestone)	225	315

# Potential Water-Bearing Zones:

Limestone	<b>210</b>	300
Sand: fine to medium-grained	15	315

# BEAUFORT COUNTY, S. C.

20

Location: Approximately 0.25 mi. west of Well	Well No.: GG	S 385	
66, Hilton Island	Elev.: 15		
Owner: No. 2 USGS Test Hole (Observation Well)			
Driller: M. M. Gray Drilling Company			
Drilled: June 1954			
		Thickness (feet)	Depth (feet)

# Pliocene to Recent (Undifferentiated):

F

Sand: fine-grained, finely disseminated phosphatic grains;	
interbedded clay, dark-gray, silty, somewhat indurated,	
carbonaceous, micaceous, fossiliferous (macroshells at cer-	
tain horizons)	20

Miocene (Undifferentiated):	Thickness (feet)	Depth (feet)
Clay: dark-green, sandy, phosphatic	35	55
Sand: coarse-grained, angular; some clay, as above		65
Limestone: white to light-gray, very sandy, phosphatic, fos- siliferous at depth (fragments, casts and molds of megafos- sils, echinoid and bryozoan remains, Ostracods, and some Foraminifera)	55	120
Textularia? sp. at 100-105.		
Clay: dark-green, very sandy, phosphatic		130
Sand: medium-grained, phosphatic		135
Oligocene (Undifferentiated):		
Limestone: light-gray, dense, nodular, much calcitized, fossil- iferous (bryozoan remains and some Foraminifera)	5	140
Limestone: cream, softer, somewhat nodular, fossiliferous (casts and molds of megafossils, bryozoan and echinoid re- mains, and some Foraminifera)	40	180
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, much calcitized and crystalline, fossilifer- ous (abundant bryozoan remains and some Foraminifera)	. 115	295
Pseudophragmina flintensis at 205-210.		
Limestone: cream, much calcitized and granular, somewhat loosely consolidated, sparsely glauconitic, fossiliferous at certain levels (bryozoan remains and Foraminifera)		545
Camerina striatoreticulata at 365-375.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: as above but more massive and crystalline at cer- tain levels, somewhat sandy, fossiliferous (Foraminifera at certain levels)	185	730
Lepidocyclina sp. at 555-565.		
Marl: light-gray to cream, fossiliferous (echinoid and bryo- zoan remains, Ostracods, and abundant Foraminifera)	10	740
Spiroplectammina mississippiensis var., Textularia adalta, Textularia dibollensis var. humblei, Robulus alato-limbatus, Dentalina jacksonensis, Nonion planatus, Nonionella hant- keni var. spissa, Siphonina jacksonensis, Marginulina co- coaensis, Gyroidina soldanii var., Discorbis assulata, Lagena		

Thickness Depth (feet) (feet)

acuticosta, Planularia sp., Spirillina vicksburgensis, Patellina advena, Guttulina problema, Globulina gibba, Polymorphina advena var., Sigmomorphina semitecta, Bolivina jacksonensis var., Angulogerina vicksburgensis, Buliminella robertsi, Cibicides lobatulus, Cibicides danvillensis, Cibicides pseudoungerianus var., Cibicides mississippiensis, Cibicides americanus var. antiquus, Cibicides westi at 730-740.

#### Summary:

Pliocene to Recent (undifferentiated)	20	20
Miocene (undifferentiated)	115	135
Oligocene (undifferentiated)	45	180
Upper Eocene (Ocala limestone)	365	545
Middle Eocene (Lisbon formation)	195	740

#### **Potential Water-Bearing Zones:**

Sand: medium-grained	5	135
Limestone	595	730

#### BEAUFORT COUNTY, S. C.

Location: Daufuskie Island Owner: No. 3 USGS Test Hole Driller: M. M. Gray Well Drilling Company Drilled: 1958	Well No.: GC Elev.: 20	S 566	
		Thickness (feet)	Depth (feet)
No samples		42	42
In Miocene (Undifferentiated):			
Sand: fine to medium-grained, subangular, phatic; interbedded clay, dark-gray to dark- indurated, blocky, silty, micaceous, carbonad	green, somewhat		
ous (macroshells at certain levels)		41	83
Sand: medium-grained, subrounded, phosphat	ic	3	86
Clay: yellowish-green, blocky, tough, sandy		10	96
Oligocene (Undifferentiated):			
Limestone: light-gray, massive, saccharoidal sandy, sparsely phosphatic, fossiliferous,			

and	molds	of	megafossils	10	-

<sup>1</sup>Cavities represent former megafossils subsequently dissolved by ground water.

	Thickness (feet)	Depth (feet)
No samples	11	117
Limestone: cream, nodular, saccharoidal, somewhat soft and powdery at certain horizons, very sandy, sparsely phos- phatic, fossiliferous (casts and molds of megafossils, echi- noid and bryozoan remains, and some Foraminifera) Rotalia mexicana var., Pyrgo sp., Quinqueloculina sp.,	18	135
$Dictyoconus^2$ sp. at 117-122.		
Limestone: cream to light-gray, massive, somewhat calcitized and nodular, fossiliferous (as above)	55	190
Operculinoides sp. at 135-140.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, somewhat crystalline and calcitized, fossil- iferous (some macroshells, abundant bryozoan remains, some Ostracods, Foraminifera)	70	260
Gypsina globula, Eponides cocoaensis, Eponides jacksonen- sis, Discorbis assulata, Nonion planatus, Cancris sp., Plan- ularia sp., Siphonina jacksonensis, Globorotalia cocoaensis, Guttulina irregularis, Cibicides americanus, Cibicides mis- sissippiensis at 190-196.		
Operculinoides floridensis, Asterocyclina nassauensis at 196-200.		
Lingulina sp. at 200-205.		
Limestone: light-gray, rather massive, much calcitized and crystalline, somewhat nodular, fossiliferous (as above)	45	305
Limestone: cream, much calcitized and granular, somewhat loosely consolidated, fossiliferous (Foraminifera at certain levels)	255	560
Orthophragmina flintensis at 345-350.		
Camerina striatoreticulata common at 426-431.		
Middle Eocene: Claiborne Group: Lisbon Formation:		
Limestone: as above, but more massive and calcitized, some- what sandy, fossiliferous at certain levels (megafossils, bryozoan remains, and Foraminifera)	140	700
Lepidocyclina sp., Operculinoides sp. at 645-650.		
Limestone: white, massive, much calcitized, somewhat granu- lar (in texture), coarsely glauconitic, sparsely fossiliferous (macroshells at certain levels)	_ 5	705
Marl: yellowish-green; interbedded limestone, as above		746
<sup>2</sup> Reworked(?) fossil of Eocene age.		

461

Thickness Depth (feet) (feet)

#### Summary:

No samples	42	42
In Miocene (undifferentiated)	54	96
Oligocene (undifferentiated)	94	190
Upper Eocene (Ocala limestone)	370	560
Middle Eocene (Lisbon formation)	186	746

#### **Potential Water-Bearing Zones:**

Limestone		530
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#### **Remarks:**

The interval 530-700 may represent late middle Eocene, i.e., Gosport equivalent. At 645-650 a species of *Lepidocyclina* was identified as possibly *Lepid. ariana*, a middle Eocene *Lepidocycline*. However, more specimens are needed before a definite specific identification of this species may be made.

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Figure I.-Well location map, Coastal Plain of Georgia