

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

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Prepared cooperatively by the U. S. Geological Survey

ATLANTA
1961

CHATHAM COUNTY

Location: Fort Pulaski, Cockspur Island
 Owner: No. 1 USGS Test Hole (Observation Well)
 Driller: M. M. Gray Drilling Company
 Drilled: May 1954

Well No.: GGS 381
 Elev.: 8

	Thickness (feet)	Depth (feet)
Pliocene to Recent (Undifferentiated):		
Clay: dark-gray, somewhat indurated, silty, carbonaceous, micaceous, fossiliferous (macroshells at certain levels); some sand, fine to medium-grained, subangular, arkosic	59	59
Miocene (Undifferentiated):		
Clay: dark-green, sandy, phosphatic; interbedded dolomitic limestone at depth, light-brown, saccharoidal, sandy	53	112
Brownish-red phosphatic pebbles common at 79-82.		
Dolomitic limestone prominent at 82-92.		
Limestone: light-gray to white, saccharoidal, sandy, phosphatic, fossiliferous (fragments, casts and molds of macroshells)	8	120
Oligocene (Undifferentiated):		
Limestone: light-gray, somewhat crystalline, nodular, much calcitized and massive, fossiliferous (bryozoan remains and some Foraminifera)	12	132
<i>Rotalia mexicana</i> var., <i>Alabamina mississippiensis</i> , <i>Siphonina advena</i> , <i>Cibicides lobatulus</i> , <i>Cibicides mississippiensis</i> at 115-122.		
Limestone: cream, somewhat nodular, rather massive, sandy, fossiliferous (casts and molds of Gastropods and some Foraminifera)	88	220
<i>Pyrgo</i> sp. at 132-142.		
<i>Quinqueloculina</i> sp., <i>Coskinolina</i> ¹ sp. at 142-152.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white, much calcitized, crystalline, somewhat saccharoidal, abundantly fossiliferous (macroshells, abundant bryozoan remains and Foraminifera)	85	305
<i>Asterocyclina nassauensis</i> at 225-230.		

¹Reworked(?) 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, relatively soft and porous, granular, somewhat loosely consolidated, sparsely glauconitic, fossiliferous at certain levels (bryozoan remains and Foraminifera).....	281	626
<i>Camerina striatoreticulata</i> at 395-401.		

Middle Eocene: Claiborne Group: Lisbon Formation:

Limestone: as above, but more massive, calcitized, somewhat sandy, fossiliferous (macroshells and Foraminifera at certain 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
<i>Canceris</i> sp., <i>Gyroïdina soldanii</i> var., <i>Cibicides pseudoungerianus</i> var. <i>lisbonensis</i> 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
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Textularia dibollensis, *Textularia adalta*, *Spiroplectammina mississippiensis* var., *Robulus alato-limbatus*, *Discorbis assulata*, *Nonion planatus*, *Nonion inexcavatus*, *Lagena acuticosta*, *Sigmoidella plummerae*, *Marginulina cocoaensis*, *Gyroïdina soldanii* var., *Angulogerina vicksburgensis*, *Bolivina 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
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Cibicides blappiedi at 950.

Canceris sp., *Eponides mexicanus* at 986.

	Thickness (feet)	Depth (feet)
Lower Eocene: Wilcox Group (Undifferentiated):		
Limestone: light-brown to cream, calcitized, more calcitized and crystalline at depth, granular, somewhat loosely consolidated, glauconitic (abundantly, so at certain levels), cherty, pyritiferous, fossiliferous (echinoid and bryozoan remains, Ostracods and Foraminifera).....	320	1,414
<i>Textularia</i> sp., <i>Robulus</i> sp., <i>Eponides</i> cf. <i>E. dorfi</i> , <i>Valvulineria scrobiculata</i> , <i>Cibicides blampiedi</i> at 1094-1114.		
<i>Operculinoides</i> sp., <i>Pseudophragmina</i> 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
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Spiroplectammina semicomplanata, *Gaudryina pyramidata*, *Nodosaria affinis*, *Pseudoglandulina manifesta*, *Valvulineria umbilicatula*, *Gryoidina depressa*, *Siphonina prima*, *Chilostomella ovoidea*, *Globorotalia membranacea*, *Globorotalia velascoensis*, *Dentalina colei*, *Bulimina* cf. *B. kugleri*, *Bulimina quadrata*, *Anomalina midwayensis*, *Anomalina pseudopapillosa* 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).....	144	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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