

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)
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 blanpiedi</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
<i>Spiroplectammina semicomplanata</i> , <i>Gaudryina pyramidata</i> , <i>Nodosaria affinis</i> , <i>Pseudoglandulina manifesta</i> , <i>Valvulineria umbilicatula</i> , <i>Gryoidina depressa</i> , <i>Siphonina prima</i> , <i>Chilostomella ovoidea</i> , <i>Globorotalia membranacea</i> , <i>Globorotalia velascoensis</i> , <i>Dentalina colei</i> , <i>Bulimina</i> cf. <i>B. kugleri</i> , <i>Bulimina quadrata</i> , <i>Anomalina midwayensis</i> , <i>Anomalina pseudopapillosa</i> 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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