

**GEORGIA
STATE DIVISION OF CONSERVATION**

DEPARTMENT OF MINES, MINING AND GEOLOGY
GARLAND PEYTON, Director

THE GEOLOGICAL SURVEY
Bulletin Number 74

**LOGS OF SELECTED WELLS IN THE
COASTAL PLAINS OF GEORGIA**

by

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ATLANTA
1964

CLINCH COUNTY

Operator: H. L. Hunt
Landowner: Alice Musgrove well 1

GGs. No. 481
Elevation: 147 ft. (derrick
floor)

Location: Land District 12, Land Lot
198; Northwest corner of southwest
quarter of Land Lot 198.

Total depth: 4088 ft.
Completed: Jan. 18, 1944.

Summary of Stratigraphy

	Depth (feet)	Thickness (feet)
Tertiary		
Oligocene		
upper, Suwanee Limestone.....	390	80
Eocene		
upper, Ocala Limestone, upper member.....	470	150
lower member.....	620	110
middle, upper middle, Avon Park Limestone.....	730	210
lower middle, Lake City Limestone.....	940	520
lower, Oldsmar Limestone.....	1460	?
Paleocene		
in beds containing Tamesí fauna at 2370 ft.	?	?
Cretaceous		
Gulf		
Lawson Limestone, upper member (?)	2820	40
Beds of Taylor age.....	2860	220
Beds of Austin age.....	3080	310
Atkinson Formation, upper member.....	3390	225
lower member.....	3615	210
Comanche undifferentiated	3825	128

Ordovician

Lower Ordovician¹ quartzitic sandstone and
dark shale

3953 to 135
total depth

Lithologic and paleontologic description of cuttings and cores. Samples are cuttings unless otherwise stated.

Depth
(feet)

Description

0 to 2370 Samples were studied microscopically but were not described. The different stratigraphic units of Oligocene and Eocene age were

¹Bridge, Josiah, and Berdan, J. M., 1951, U. S. Geological Survey open-file report, p. 5 and map.

Depth
(feet)

Description

determined on the basis of characteristic species of Foraminifera that were identified in the samples, and the approximate depth to the top of each unit is shown in the summary of stratigraphy.

In Paleocene Series

Beds containing Tamesi fauna

2370-2400	Limestone, gray, hard, marly, slightly glauconitic; a few fragments of the limestone are sandy. The sample contains a little light grayish-tan chert.
2400-2410	Chalk, cream, slightly glauconitic. The sample contains abundant specimens of very small, poorly preserved, non-diagnostic Foraminifera; <i>Asterigerina</i> sp. common.
2410-2420	Sample not described.
2420-2450	Limestone, light-gray and light-cream, hard, chalky. The sample contains a little chert, and specimens of small Foraminifera like the sample at 2400-2410 ft.
2450-2460	Sample not described.
2460-2470	Limestone, gray and cream, chalky, nodular, slightly glauconitic; many specimens of small Foraminifera like sample at 2400-2410 ft.
2470-2480	Sample not described.
2480-2490	Limestone, cream, nodular, somewhat glauconitic. The sample contains a little chert. The limestone has a sandy appearance because it contains a large amount of very finely fragmental calcitic material. The microfauna is composed of specimens of small Foraminifera like the sample at 2400-2410 ft.
2490-2550	No change.
2550-2560	Limestone, like sample at 2480-2490 ft., but more calcitic. White chert in the sample has a spicular appearance; the microfauna is unchanged.
2560-2680	No change.
2680-2690	Like sample at 2550-2560 ft., but the limestone is softer, contains fine-grained sand and large worn fragments of calcite; the microfauna is unchanged.
2690-2770	No change.
2770-2780	Sandstone, greenish-gray, very fine grained, glauconitic, containing much calcitic material. The sample contains gray, sandy, marly clay; specimens of <i>Nodosaria affinis</i> and a few other foraminiferal species.
2780-2800	Samples not described.
2800-2810	Chalk, white, sandy, and gray, very fine grained, somewhat glauconitic sandstone. The sample contains a little gray chert and non-diagnostic specimens of small Foraminifera.
2810-2820	Limestone, light-cream, chalky, glauconitic; light grayish-tan chert

Depth
(feet)

Description

common. The sample contains specimens of small Foraminifera, specimens of *Globorotalia velascoensis*, and other species characteristic of the beds of Paleocene age that contain a Tamesí fauna.

Cretaceous

Gulf Series

Lawson Limestone. Upper Member (?)

- 2820-2830 Limestone, white, like sample at 2810-2820 ft., a little glauconite, and a little light-gray spicular chert; many fragments of light-brown dolomite that possibly marks the top of the upper member of the Lawson Limestone (Navarro age).
- 2830-2840 Dolomite, light-cream, finely granular, is the dominant material in this sample.
- 2840-2850 Limestone, white, containing scattered small grains of dark-green glauconite. The limestone is more chalky than that in the overlying beds of Paleocene age. Indigenous specimens of Foraminifera are not abundant but specimens of *Globotruncana arca* are present.
- 2850-2860 Like sample at 2840-2860 ft., but the limestone is only slightly glauconitic.

Beds of Taylor age

- 2860-2870 Like sample at 2850-2860 ft.; highest appearance of *Inoceramus* fragments, and a few specimens of *Globorotalites conicus* and *Stensioina americana*.
- 2870-2880 Sample not studied.
- 2880-2890 *Inoceramus* fragments are abundant.
- 2890-2970 Samples not studied.
- 2970-2980 Clay, gray and greenish-gray, soft, marly, begins to show in the samples and increases in amount in the samples below this depth. A little sand is present but may be caving.
- 2880-2990 Like the sample at 2970-2980 ft.; fine to moderately fine-grained sand is about 20 percent of the sample.
- 2990-3060 Samples not studied.
- 3060-3070 Marl, gray.
- 3070-3080 Sample not studied.

Beds of Austin age

- The top of the beds of Austin age is placed at 3080 ft. on the basis of electric log correlation supported by the data from samples.
- 3080-3090 Limestone, cream, and a few fragments of light-gray marl. The material being drilled seems to be gray and greenish-gray marl containing streaks of limestone. *Inoceramus* fragments are

Depth (feet)	Description
	abundant; fine to coarse-grained sand is about 50 percent of the sample.
3090-3100	Marl, about 75 percent of the sample; fragments of glauconitic limestone are about 25 percent of the sample. <i>Inoceramus</i> fragments are common, and a few shell fragments are present in sandy fragments of the marl.
3110-3120	Marl. Highest occurrence of specimens of <i>Citharina texana</i> indicates the Austin age of the beds.
3120-3240	Samples not studied.
3240-3250	Marl, dark-gray, slightly speckled; highest occurrence of this type of lithology.
3250-3300	Samples not studied.
3300-3310	Shale, greenish, and brownish-gray thinly flaky shale. Specimens of <i>Globotruncana</i> sp., <i>Globigerina</i> sp., and <i>Gumbelina</i> sp. are common; specimens of <i>Planulina austiniana</i> indicate the Austin age of the beds.
3310-3380	Samples not studied.
3380-3390	Shale, dark, flaky, speckled, and fragments of dark-brown, thinly flaky, speckled, greasy-looking shale.
Atkinson Formation. Upper Member.	
3390-3400	Shale, like sample at 3380-3390 ft., and fragments of white, soft, fine-grained, glauconitic sandstone; most of the sand grains are angular.
3400-3410	Sample not studied.
3410-3420	Sand and sandstone like sample at 3390-3400 ft., and several types of gray and greenish-gray thinly flaky clay shale; a little green, smooth-textured, noncalcareous shale; a few fragments of fish bones.
3420-3477	Samples not studied.
3477	Sidewall core. Sand, white, fine-grained, angular.
3477-3620	Samples not studied.
Atkinson Formation. Lower Member.	
3615	Top of lower member of Atkinson Formation is placed on the basis of electric log correlation in connection with the data from samples.
3620-3630	Shale, green and gray, several types; sand; shell fragments.
3630-3640	Sample not studied.
3640-3650	Shale, green, flaky; many specimens of calcareous species of Foraminifera that are characteristic of the upper member of the Atkinson Formation, some or all of which are probably caving; several specimens of arenaceous species of Foraminifera that are indigenous to the lower Atkinson.

Depth (feet)	Description
3650-3680	Samples not studied.
3680-3700	Like sample at 3640-3650 ft.
3700-3710	Shale, like sample at 3640-3650 ft.; fragments of light-gray, hard, dense, fine-grained, micaceous, glauconitic sandstone begin to show in the samples.
3710-3720	Shale, like sample at 3700-3710 ft., and many fragments of white, loosely consolidated, fine-grained sandstone containing a few shell fragments and fish teeth.
3720-3736	Samples not studied.
3736	Sidewall core. Sandstone, white, loosely consolidated, fine-grained, glauconitic.
3736-3840	Samples not studied.

Comanche Series undifferentiated

3825	Top of Comanche Series is placed on basis of electric log correlation in connection with the data from samples.
3840-3850	Sand, unconsolidated, containing greenish-yellow and pink grains, coarse-grained, and a little feldspar.
3850-3870	Samples not studied.
3870-3880 ²	Sand like sample at 3840-3850 ft., and yellow, green, and multi-colored, hard, very finely micaceous shale.

CLINCH COUNTY

Operator: Wiley P. Ballard, Jr. GGS. No. 496
 Landowner: Timber Products Co. Elevation: 214 ft. (derrick
 Well 1A floor)
 Location: Land District 7, Land Lot Total depth: 4232 ft.
 306; 2050 ft. east and 1760 ft. south Completed: Feb. 8, 1956
 of northwest corner of Land Lot
 306.

Summary of Stratigraphy

	Depth (feet)	Thickness (feet)
Tertiary		
Eocene		1528
upper, Ocala Limestone, upper member	492	188
	(1st sample)	
lower member	680	260
middle, undifferentiated	940?	740
lower, beds of Wilcox age	1680	340

²Samples below 3880 ft. not studied.