GEORGIA
STATE DIVISION OF CONSERVATION

DEPARTMENT OF MINES, MINING AND GEOLOGY
GARLAND PEYTON, Director

THE GEOLOGICAL SURVEY
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LOGS OF SELECTED WELLS IN THE COASTAL PLAINS OF GEORGIA

by

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ATLANTA
1964

Depth (feet)	Description
	irregularly distributed; many grains are tinted pink and yellow. Bottom. Clay, mottled and streaked, white, yellowish-brown, and mustard, waxy, sandy. The sand grains are poorly sorted, unevenly distributed and etched. One large fragment of quartzite (pebble?) is present.
3831-3835	Core 59. Recovery 4 ft. Top. Quartzite pebble(?) or boulder(?), mottled tan, brown, and pale red. Middle, Clay, mottled red and mustard, highly sandy. Bottom. Sandstone, hard, ferruginous.

Ordovician(?)[3]

Lower Ordovician(?) Series

3835-3835'4"	Core 60. No recovery.
3835'4"-3835½	Core 61. Recovery 2 in. White quartzite.
3839	Fragments of white, hard, fine-grained sandstone and cavings.
3840	Fragments of white and pink, hard, moderately dense, fine-grained sandstone and cavings.
3841	Fragments of white, dense, fine-grained sandstone; a few fragments seem to be quartzitic. Many cavings.
3846½-3846¾	Core 62. No recovery.
3846¾-3847	Core 63. No recovery.
3847	Fragments of white and pink, dense to moderately dense fine-grained sandstone and quartzite(?).

CLINCH COUNTY

Operator: Luke Grace Drilling Co. GGS. No. 338

Landowner: Lem Griffis well 1 Elevation: 176 ft. (derrick floor)

Location: Land District 13, Land Lot 36; center of Land Lot 36 Total depth: 4588 ft.
Completed: Jan. 24, 1953

[3]Bridge, Josiah, and Berdan, J. M., 1951, U.S. Geological Survey open-file report, p. 5, 6, and map. According to Applin, P. L., 1951, U.S. Geological Survey Circular 91, p. 28 the oldest formation penetrated in the Barlow well is classified as "Lower Cretaceous(?)."

Summary of Stratigraphy

	Depth (feet)	Thickness (feet)
Tertiary		
Not studied		
Cretaceous		
Gulf		
Lawson Limestone upper member(?)	2790 (1st sample)	110?
Beds of Taylor age	2900?	?
Beds of Austin Age (no samples 3100-3620 ft.)	?	?
Atkinson Formation upper member	3620?	180?
lower member(?)	3800?	43?
Pre-Cretaceous		
Igneous rocks	3843 to total depth	745

Lithologic and paleontologic description of cutting samples.

Depth (feet)	Description
0-2790	Samples not studied.
	Cretaceous
	Gulf Series
	Lawson Limestone. Upper Member(?).
2790-2800	Dolomite, light-tan, moderately coarsely crystalline, somewhat porous; contains a few blebs of gypsum. The lithology suggests that the sample is from the upper member of the Lawson Limestone.
2800-2810	Like the sample at 2790-2800 ft. The dolomite contains a few blebs of gypsum.
2810-2900	No samples.
	Beds of Taylor age.
2900-2910	Limestone, white, hard, chalky, containing irregularly distributed gray areas. Much finely fragmented calcitic material is embedded in the limestone, and is probably derived from broken molds and fragments of molds of small specimens of Foraminifera, and from fragments and prisms of *Inoceramus*. The foraminiferal fauna, which suggests the uppermost part of the beds of Taylor age, is composed of specimens of *Anomalina cosdeni, Stensiöina americana, Globorotalites conicus, Bolivinoides deco-*

Depth (feet)	Description
	rata, Robulus sp., *Globotruncana marginata, Bolivina incrassata, Buliminella carseyae, Anomalina sholtzensis, Planulina cedarkeysensis.* The sample gives no indication that the lower member of the Lawson Limestone was penetrated in this well.
2910-2950	Samples not studied.
2950-2960	Chalk, white, soft. Washed residue is small, but contains a fauna similar to the sample at 2900-2910 ft.
2960-3000	Samples not studied.
3000-3010	Chalk, white, soft. Washed residue is small and is composed of a few nodules of hard chalk, a few small rounded nodules of pyrite, and fragments of *Inoceramus* and other fossil bivalves.
3010-3020	Like sample at 3000-3010 ft.; also fragments of echinoid spines and a few specimens of *Anomalina* sp.
3020-3030	Chalk, white. Washed residue is small and composed of a few fragments of hard chalk, a few fragments of *Inoceramus*, and echinoid spines.
3030-3040	Chalk, white. Washed residue is moderately large, and is composed of large fragments of indurated chalk in which are embedded fragments of *Inoceramus*, echinoid spines, specimens and calcite casts of specimens of Foraminifera, and small crystals of pyrite. No narrowly restricted species of Foraminifera were indentified.
3040-3050	Like the sample at 3030-3040 ft., but the chalk contains few embedded microfossils and fragments.
3050-3060	Chalk, white, soft, and a moderately large residue of cuttings of dolomite, fragments of *Inoceramus* and other fossil bivalves, and specimens of nondiagnostic species of Foraminifera. The sample may be largely cavings.
3060-3070	Chalk, white, soft. Washed residue is moderately large and composed of fragments of hard chalk, in which are embedded the finely fragmented debris of small fossils; many fragments of *Inoceramus* and other fossil bivalves; a few nodules of pyrite.
3070-3080	Chalk, white, soft. Washed residue is small and like the sample at 3060-3070 ft.
3080-3090	Chalk, soft, white. Washed residue is small and composed mainly of fragments of light-tan dolomite (probably caving), a few fragments of hard chalk, *Inoceramus* fragments, and sparse specimens of Foraminifera.
3090-3100	Dolomite, chalk-coated. Washed residue is large and composed of light-tan and light-brown, moderately finely crystalline, irregularly porous dolomite; nodules of hard chalk, and of pyrite; Inoceramus prisms; a few specimens of Foraminifera. The dolomite is probably caving. The sample contains nothing to suggest that the drill has penetrated a stratigraphic unit older than the beds of Taylor age.
3100-3620	No samples.

Depth (feet)	Description
	Atkinson Formation. Upper Member?. (electric log correlation)
3620-3800	No samples.
	Atkinson Formation. Lower Member(?).
3800-3807	Sand, poorly sorted, fine to moderately coarse-grained, clear quartz. The sample contains small, colorless dolomite rhombs, irregular-shaped nodules of bright-green glauconite, a few phosphatic nodules, nodules of crystalline pyrite, and a few fragments of thin white shells of brackish-water(?) bivalves. The sand is almost exactly like the sand penetrated in the lower member of the Atkinson Formation in other nearby wells. A few cavings of the typical speckled shale of the lower part of the beds of Austin age is believed to indicate that the unit was penetrated in the part of the geologic section from which no samples were received.
3810	Sandstone like the sample at 3800-3807 in its general character, but more highly glauconitic; the sand grains are fairly well sorted and mostly of medium sized.
3821	Sand, coarse-grained, clear quartz; the average grain-size is about 1 to 1.5 mm. The sample contains a little glauconite, a few shell fragments, phosphatic nodules, and nodules of light grayish-brown, dense very finely crystalline, slightly glauconitic dolomite.
3820-3830	Like the sample at 3821, and some pebble-size grains of sand.
3830-3840	Sand like the samples below 3800 ft.; also many dark-gray, worn, sand-encrusted fragments of *Ostrea* sp. and a little glauconitic and phosphatic material.
3840-3850	Conglomerate(?) composed, chiefly, of hard, angular fragments of light bluish-green, light brownish red, and mustard-colored weathered(?) igneous rock; also many fragments of dark brownish-red, and mottled red, green and mustard-colored clay shale that may be the matrix containing pebbles and fragments of igneous rock.
	Pre-Cretaceous
3843-4588 T.D.	Igneous rocks. The top of the igneous rock at 3843 ft. is based on the correlation of the electric log of the well.