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

Depth (feet)	Description
315	Sandstone, very fine grained, slightly glauconitic (fine-grained glauconite), is about 80 percent of the sample. About 20 per- cent of the sample is composed of small chalky fragments, much of which is probably worn and broken fossil debris that was irregularly scattered in the sandstone. Bryozoan fragments are common.
325	Sandstone, grayish-tan, very fine grained, calcitic, slightly glauco- nitic, like sample at 315 ft.; a few chalky fragments are present.
330	Sandstone, highly calcareous, very fine grained, slightly glauco- nitic. Many fragments of chalky, glauconitic limestone contain traces and fragments of fossils that indicate the material is probably caving from higher levels.
340	Limestone, white, chalky, glauconitic, containing many fragments of Operculinoides sp., Camerina sp., Lepidocyclina (Polylepidina) antillea, and Discocyclina flintensis.
365	Limestone, light bluish-gray, hard, dense, containing small scat- tered particles of glauconite.
373	Like sample at 365 ft.
422 T.D.	Limestone, light-gray, moderately hard, sandy, glauconitic (fine- grained glauconite); no indigenous fossils.

DECATUR COUNTY*

Owner Operator: U. S. (War Depart-		
Gebeel Well 1	COC N. FR	
School Well 1	GGS. NO. 57	
Landowner:	Elevation: 130 ft.	
Location: 6 mi. northwest of Bain-	Total depth: 1035 ft.	
bridge, Ga., and about 3/4 mi. south-	Completed: May 28, 1942	2
west of Georgia Highway 1.		

Summary of Stratigraphy

•		Depth (feet)	Thickness (feet)
Те	rtiary		
Miocene(?) undifferentiated	(1 sample)	20	?
Oligocene(?) do	(1 sample)	55	?
No samples		60	55
In'Eocene	· · · · ·		~ 4
upper, Ocaia Limestone, upper lower	member	169	54 137

*Publication of this data is authorized by the Sun Oil Company, for whom the report was prepared on a commercial basis.

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		۱. ·.	Depth (feet)	Thickness (feet)
middle	Unit A		306	47
	' B	1.		77
· .	C		430	107
5				to
1.5	D			total 498
			d	epth .

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

Depth (feet)

20

55

115

130

169

185

195 · 205

124

Description

Tertiary

Miocene(?) undifferentiated

Clay, tan, sandy, slightly micaceous.

Oligocene (?) undifferentiated

Limestone, chalky, water-worn, containing traces of fossils.

In Eocene

Upper Eocene. Ocala Limestone. Upper Member

. .

Limestone, light-cream, chalky, porous, composed of poorly-preserved, fragmentary molds of fossil shells, among which are *Lepidocyclina* sp., *Gypsina globula*, bryozoan fragments, and echinoid spines.

Limestone, iron-stained, hard, chalky, water-worn, showing traces of fossil shells, among which are fragments of *Lepidocyclina* sp. Upper Eocene. Ocala Limestone. Lower Member.

Limestone, white, chalky, porous, fossiliferous. Among the poorlypreserved molds, fragments of molds, and impressions of shells, are specimens of *Lepidocyclina* sp., *Operculina* sp., worn fragments of *Asterocyclina*(?), *Amphistegina pinarensis*, *Robulus* sp., *Amphistegina alabamensis*, and specimens of a few other small Foraminifera (Ocala species).

Limestone, cream, hard, chalky. A few fragments of limestone contain traces of sections of microfossils.

Limestone, chalky. A very small sample.

Limestone, white, chalky, highly microfossiliferous, containing many specimens of *Lepidocyclina ocalana* and varieties, a few specimens of *Operculina* sp., and many specimens of *Amphistegina alabamensis* that is common in the lower member of the Ocala Limestone in western Florida.

220

Limestone, chalky, fossiliferous. Worn fragments of Lepidocyclina sp. are common, and specimen's of Amphistegina pinarensis

LOGS OF SELECTED WELLS IN THE COASTAL PLAIN OF GEORGIA

Description

are abundant. Also present are poorly-preserved specimens of Camerina sp., Operculina sp., Gypsina globula, and bryozoan fragments.

Limestone, cream, chalky, fossiliferous. The foraminiferal material consists of worn chalky molds. The species seem to be the same as in the sample at 220 feet, but specimens of *Camerina* sp. are much more abundant.

Limestone, white and cream, hard, nodular, containing abundant traces of fossils and a few grains of glauconite. The sample contains fragments of a large coarsely beaded *Lepidocyclina* sp. This sample is possibly the equivalent of the Moody's Branch Marl at the base of the Jackson (upper Eocene) Group in Mississippi.

Middle Eocene

Sandstone, clear quartz, very fine grained, somewhat glauconitic, chalky. The sandstone contains many calcitic fragments that seem to be derived from broken fossil shells; one poorly-preserved chalky specimen of *Lepidocyclina* sp.; and worn bryozoan fragments.

Like sample at 306 ft.

1.15

Unit A

140.00

306

Ar de

Limestone, white, hard, somewhat glauconitic, containing fragments of sections of Operculinoides sp., Lepidocyclina (Polylepidina) antillea, Pseudophragmina sp. About 50 percent of the sample is very uneven grained clear quartz sand. Cavings of limestone from higher levels are common.

Sand, like sample at 327 ft., and small fragments of white, hard, slightly glauconitic chalk. The fauna seems to be like the " sample at 327 ft., but the specimens' are too poorly presented for specific identification.

Depth

(feet)

270

290

318 327

340

Limestone, light-gray, dense, sandy (very fine grained sand), glauconitic (very fine grained glauconite). The grains of glauconite are evenly distributed in the limestone.

370 Like sample at 353 ft.

. . . .

375 🚛 Like sample at 353 ft. 🛶

400 Limestone, light-gray, highly sandy, chalky. The sample contains a trace of mica, fragments of Ostrea sp. and échinoids, and a very few specimens of smaller Foraminifera, including Cibicides text.

Like sample at 400 ft.

430 . . . Unit C

426

Chalk, highly sandy, slightly glauconitic, containing many worn fragments of a thin-shelled bivalve (Ostrea(?) sp.). Several poorly-preserved specimens of small. Foraminifera also; occur,

125

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Description

among which Asterigerina lisbonensis is the dominant form, and Globigerina sp., Cibicides sp., and others are also present.

Limestone, iron-stained, hard, glauconitic (moderately coarse grained glauconite), sandy (moderately coarse-grained sand), containing many fragments of a partly calcitized fossil bivalve. The material has the appearance of having been weathered during exposure at the surface.

Limestone, white, highly glauconitic (moderately coarse grained glauconite), sandy (moderately coarse grained sand), containing a trace of mica. Poorly-preserved fragments of macrofossils are embedded in the limestone. About 50 percent of the sample is very uneven grained clear quartz sand.

445 Like sample at 438 ft.

Sand, chalky, coarse-grained, uneven, glauconitic, containing worn fragments of fossil bivalves, and several chalky, glauconitic specimens of Asterigerina lisbonensis.

Like sample at 458 ft.

Sand, clear quartz, uneven-grained, glauconitic; sand grains and angular to subangular. Several specimens of small Foraminifera are present, among which Asterigerina lisbonensis is dominant, and Gyroidina soldanii var. octocamerata is fairly common. The sample also contains a few ostracodes and echinoid spines.

Limestone, white, hard, sandy, glauconitic, containing fragments of molds of macrofossils.

Sand, clear quartz, moderately coarse-grained, moderately even grained, glauconitic, containing a few fragments of a thinshelled Ostrea(?) sp., and a few chalky fragments of other fossils.

Like sample at 490 ft., but both sand and glauconite are coarser grained, and nodules of glauconite are abundant.

500 Sand, clear quartz, slightly glauconitic. The sand grains are moderately fine, moderately even, and angular.

505

537

Sand, pinkish-tan, clear quartz, very uneven grained, angular to subangular to rounded. Sample contains some glauconite (probably caving) and some fragments of pink clay.

the active

542 Like sample at 537 ft.

Unit D

Like sample at 500 ft.

- 555 Sand, pinkish-tan, clear quartz, moderately coarse, moderately even grained; a trace of colorless mica. The color of the sand is due to staining by the clay matrix.
- 576 Sand, light-tan. The sand is somewhat coarser than the sample at 555 ft., and contains a few nodules of glauconite.

590 Like sample at 576 ft.

605 No change.

Depth (feet)

435

438

458

468 476

486

490

495

126

Depth (feet)		Description
625		No change.
642		No change.
651		No change.
664		No change.
666	[] ·	No change.
681		No change.
697		Like preceding samples, but contains almost no glauconite.
721 (Like sample at 697 ft.
755		Like sample at 721 ft., but contains no glauconite.
768		Like sample at 755 ft., but sand is coarser grained.
780		Like sample at 768 ft., but contains fragments of sandy limestone that are probably caving from higher levels.
820		No change.
909		No change.
925		No change.
940		Sand, like preceding samples, but finer grained, somewhat chalky, and containing many nodules of glauconite. The sample contains several poorly-preserved specimens of smaller Foraminifera, among which <i>Robulus</i> sp. (close to <i>Lenticulina rotulata</i>) is a common form; no diagnostic species seem to be present.
970		Sand, clear quartz, uneven grained, somewhat glauconitic, and similar, in general, to sample at 940 ft. This sample also con- tains a few specimens of nondiagnostic species of Foraminifera, and a few other specimens which probably caved from higher depths.
1035 /	T.D.	Sand and a little glauconite like the sample at 970 ft., but the sand is somewhat finer grained.

DECATUR COUNTY

Operator: Hunt Oil Co.GGS. No. 168Landowner: Metcalf Well 1Elevation: 104 ft. (derrick
floor)Location: Land District 21, Land Lot
260Total depth: 6152 ft.
Completed: Aug. 19, 1944

Summary of Stratigraphy

Depth	Thickness	
(feet)	(feet)	

Tertiary

Paleocene

In beds containing Tamesí fauna at 1930 ft.....????

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