

1944.) Cole (1941, p. 16) reports *Borelis* sp. at a depth of 3350 feet.

Nassau County—St. Marys River Oil Corporation No. 1 Hilliard Turpentine Company (sec. 19, T. 4 N., R. 24 E.), depths 2215 to 2750 feet (Applin and Applin, 1944) or 2785 feet (Cole, 1944, p. 28); total depth of well, 4821 feet. It contains *Borelis gunteri* and *B. floridanus*.

Polk County—Pioneer Oil Company No. 1 Hecksher-Yarnell (sec. 28, T. 30 S., R. 25 E.), depths 2630 to 4300 feet; total depth of well, 4540 feet. (Applin and Applin, 1944.)

Sumter County—Dundee Petroleum Company "Bushnell well" (sec. 36, T. 20 S., R. 22 E.), depths 2005 to 2940 feet; total depth of well, 3070 feet. (Applin and Applin, 1944.)

PORTERS CREEK FORMATION

GENERAL FEATURES

Name—The Porters Creek formation was named from a creek in Hardeman County, Tennessee, by Safford in 1864. The continuation of this formation in Alabama was later (1892) called "Sucarnochee" by E. A. Smith, but this synonym seems unnecessary.

Characters and thickness—The Porters Creek at the outcrop consists of brittle gray to black clay or shale with conchoidal fracture. It is several hundred feet thick. According to Applin and Applin (1944), wells in northwestern Florida show that the lower part of the Paleocene series consists of gray to cream-colored marly clay and greenish-gray highly fossiliferous marl. This is overlain by gray clay, sandy clay, and less fossiliferous marl.

Distribution—The Porters Creek crops out in a great semicircle that extends from western Tennessee through Mississippi far into Alabama. Presumably it merges seaward into the Cedar Keys limestone.

Stratigraphic relations—At the outcrop the Porters Creek either rests directly and unconformably on strata of the Upper Cretaceous series or is separated from those strata by a thin bed of limestone of the Clayton formation of Paleocene