

DEEP TEST IN THE OUACHITA STRUCTURAL BELT
OF CENTRAL TEXAS

R. A. Rozendal and W. S. Erskine

ABSTRACT

Shell Oil Company, Barrett No. 1, a 20,310 foot wildcat in Hill County, Texas, was drilled on a large anticlinal complex in pre-Jurassic strata delineated by the seismograph. The well penetrated 3,904 feet of Cretaceous and Jurassic strata, 9,691 feet of phyllites, slates, and quartzites of unknown age, 6,060 feet of metamorphosed carbonate section of possible Devonian through Cambrian age, 125 feet of quartzite, and bottomed in metamorphosed quartz diorite. This large structure could have been formed (1) by decollement folding and thrusting, (2) as an external miogeanticlinal ridge, (3) as an autochthonous ruptured basement fold or uplift, (4) by emplacement of a plutonic body, or (5) by a combination of the above.