

ABSTRACT

Reconnaissance profiles covering 1,835 miles and detail shooting covering 143 miles (all with towed magnetometer recording) were obtained from August 16 to September 18, 1969 in offshore permits NSW EPP/1, VIC/P3, VIC/P4, T/1P, T/9P, T/2P and T/10P in the Tasman Sea and Bass Strait.

The objectives of the reconnaissance work (sparker) was to obtain information on the configuration of the basins, local structures, and the thickness of the sedimentary sequences. The purpose of the multi-coverage work (air-gun) and computer processing was to detail existing structural anomalies.

The detailed work was concentrated on what is considered to be a drillable elongate anticline in T/1P covering 11 square miles in 350 to 400 feet of water and having about 270 feet of vertical closure. About 1,500 to 2,000 feet of highly prospective Latrobe Coal Measures are thought to exist on the structure.

A domal anticline at basement level was found in the southern part of NSW EPP/1 where a maximum of about 3,500 feet of reflecting section is recognizable. The feature has approximately 900 feet of relief encompassing 20 to 25 square miles, but apparently its crest is covered only by less than 1,000 feet of Tertiary (?) section.

At least one large basement anticline with interesting sedimentary cover was found in each of T/9P and T/2P, the former in 3,000 to 5,000 feet of water and the latter on the steep west Tasmania shelf between 500 and 6,000 foot water depths. Other anticlinal features were indicated in deep water in T/2P.