

Summary

Koorkah-1, was the first exploration well drilled in the exploration permit T/18P in the Bass Basin by Amoco Australia Petroleum Company and the third in a series drilled by the Company in the Bass Basin. T/18P is one of three permits operated by Amoco in the Bass Basin, located offshore between Victoria and Tasmania (Figure 1). Amoco farmed in to this permit acquiring a 50 percent interest and the operatorship on March 23, 1984.

Koorkah-1, with a planned depth of 3250 meters, was spudded on November 27, 1985. The well was a test of a northwesterly trending faulted anticline with seismically mapped structural closure of Early Eocene to Early Paleocene-aged sediments within the Eastern View Coal Measures (E.V.C.M.); see Enclosure 1. Less reliable seismically defined structural closure was thought to be present at the Late Cretaceous level within the E.V.C.M. The primary target of the Koorkah-1 well was the sandstones of Early Eocene - Late Cretaceous age within the E.V.C.M. The secondary drilling target was sandstones of the upper part of the Early Cretaceous Otway Group, expected to be present beneath an angular unconformity at the base of the E.V.C.M. (Enclosure 1).

The stratigraphy of the E.V.C.M. in the Koorkah-1 well was much as predicted, and consisted of interbedded sandstones, siltstones, claystones and minor coals with a doleritic intrusion encountered between 2096-2130 meters (Figure 2). The dolerite may be correlative with the intrusions of Early Miocene to Late Oligocene age that were encountered in the Yolla-1 and Tilana-1 wells. An angular unconformity is present at 2690 meters in Koorkah-1. Since the age of the sedimentary section on both sides of the unconformity is Late Cretaceous (Maastrichtian), these rocks belong to the lower part of the E.V.C.M. and not to the anticipated upper part of the Lower Cretaceous Otway Group. The age of the rocks at total depth (3148.9m) is Maastrichtian-Campanian (Late Cretaceous), representing the lower part of the E.V.C.M.

The Koorkah-1 well was terminated at 3148.9 meters because of confirmation by the wireline logs of increasingly poorer reservoir quality high water saturated sandstones with depth and lack of reliable structural closure below the unconformity. Due to a lack of encouraging hydrocarbon shows throughout the E.V.C.M., the well was plugged and abandoned on December 29, 1985 without testing.