

PREVIOUS WORK

GEOLOGICAL

Prior to the drilling of Koorkah-1, five exploratory wells had been drilled in permit T/18P. Of the five, only Cormorant-1 and Bass-3 recovered hydrocarbons. Cormorant-1 recovered biodegraded oil near the top of the Early Eocene and Bass-3 recovered gas-condensate and water at the top of the Paleocene.

The stratigraphic sequence in permit T/18P is believed to contain in excess of 4500 meters of non-marine to shallow marine, early Cretaceous to late Eocene clastics overlain by in excess of 2100 meters of late Eocene to Recent marine clastics and carbonates. This is based on a combination of surrounding well control, regional geology and seismic data. The primary reservoir objectives are the sandstones of the Late Cretaceous to Late Eocene Eastern View Coal Measures (E.V.C.M.) with a secondary stratigraphic objective, the sandstones of the Turonian and older Otway Group.

GEOPHYSICAL

Geophysical surveys have been undertaken in the Bass Basin since 1960, with the more relevant surveys being shot during the years 1972 to 1984. A number of lines from these previous surveys were reprocessed (1518 km) to compliment the Amoco 1984 TNK survey, in which 979 kilometers of data was acquired in T/18P. A further 360 kilometers of data was acquired in May, 1985 to detail the Koorkah structure. Prior to drilling Koorkah, a seafloor survey, and a high resolution survey were conducted to determine the presence of shallow faults and gas.

Enclosure 1 shows the structure of Koorkah at the Early Paleocene level and the dip line TPO 5-7, on which Koorkah-1 was drilled. The Koorkah feature is a faulted four-way dip closure at Early Eocene to Early Paleocene levels within the E.V.C.M. Koorkah-1 was not sited on structural closure at the prognosed top Otway Group level, as the upper levels were considered more prospective. Nevertheless, the additional stratigraphic information to be acquired by drilling the Otway Group was considered advantageous for future exploration within the Bass Basin.