PREVIOUS WORK

PREVIOUS GEOLOGICAL WORK

Yolla-1 was drilled in the central part of the Bass Basin, in permit T/14P. Twenty-one petroleum exploration wells had been drilled previously, four of which have had significant hydrocarbon shows. Cormorant-1 recovered biodegraded oil and gas-condensate on formation interval tests, whilst Pelican-1, -2 and -4 recovered gas and condensate on formation interval and repeat formation tests. No drill stem or production tests have been performed to date in the Bass Basin.

The stratigraphic sequence in permit T/14P is believed to contain up to 4600 m of marginal marine and non-marine, early Cretaceous to late Eocene clastic sediments overlain by a late Eocene to Recent marine sequence up to 2100 m thick. The primary reservoir objectives are in sandstones within the late Cretaceous to late Eocene Eastern View Coal Measures (EVCM). The EVCM consists of sandstones interbedded with shales and coals deposited in nearshore marine to lacustrine environments.

PREVIOUS GEOPHYSICAL WORK

Geophysical surveys have been undertaken in the Bass Basin since 1960, with the more relevant surveys being shot during the years from 1972 to 1984. The last detail survey was that undertaken by Amoco Australia Petroleum Company in 1984. A number of lines from the previous surveys were reprocessed (324 km) to complement the Amoco 1984 TNK4 survey, in which 537 kms over T/14P were acquired.

Enclosure 1 shows the structure of Yolla at the EVCM level and the reprocessed line HB73A-169, on which Yolla-1 was drilled. The Yolla structure consists of both dip and associated fault closure below the top of the EVCM and is located at the intersection of two normal fault systems.