

Closures are mapped at the top EVCN, middle *M. diversus* and *L. balmei* levels. Failure at Pelican 3 is attributed to lack of cross fault sealing due to unfavourable juxtaposition of the reservoir targets in the Early Eocene and Palaeocene against highly porous and permeable sandstones of the upper EVCN. Lead O is located to the southeast and updip of Pelican 3 but is considered high risk because of similar doubts with respect to cross fault sealing. Leads N and M are of lower risk as the fault throws on their closures are insufficient to juxtapose reservoirs against the porous and permeable upper EVCN.

Play Type 4. Leads located along the southwestern edge of the Pelican Trough near the Bass Basin margin. Leads H and I are the largest closures mapped, and are fault dependent. Reservoirs are predicted to have good to excellent quality at these locations due to shallow depth of burial. Intraformational sealing units are not anticipated in the EVCN and therefore, although closure is mapped at the middle *M. diversus* level, it is considered that the top EVCN is the primary target. Onlap, pinchout and unconformity plays may also exist along this margin. Lead J is an example of a closure developed at the pinchout edge of the upper EVCN. Mapping of the prospects is based only on regional seismic data. Prospects are dependent on a relatively long and tortuous hydrocarbon migration route for charge.

Play Type 5. Several untested potentially fault independent closures at the top of the EVCN have been identified in T91-2. This play type has been tested previously at Pelican 3 and Pipipa 1 without success despite the presence of excellent quality reservoirs. The major problem appears to be access to hydrocarbon charge. Shows in wells are either weak or absent (Enclosure 10). One of the largest examples of this play is Lead K, updip of Pelican 4. However, the absence of significant fault penetration to the top EVCN makes it unlikely that vertical hydrocarbon migration has occurred. Other significant closures along the upthrown side of the Pelican half graben bounding fault system are Leads O and C. These are more attractive in that charge to the top EVCN reservoirs up faults may have occurred. Leads O and C are closer to the fault system than Pelican 3. The other significant closure at top EVCN is located at the Penguin Lead where the closure is cut by crestal faults. Failure of Pipipa 1 at the top EVCN casts doubt on whether the upper EVCN will be charged at Penguin Lead.

Reserve calculations for each of the prospects and leads are summarised in the following table and are documented in detail in the Prospect and Lead data sheets that follow.