

Seismic Maps(Enclosures)

Maps 1 and 2, are the east and west panels of a seismic time structure map at the Paleocene L. balmei (unconformity) horizon. The scale is 1:100,000. The contour interval is 10 milliseconds. These two maps cover the whole of Permits T-15-P and T-16-P area.

The sub-crop area of this horizon is indicated. So is the location of the leads and prospects so far identified. The regional alignments are those of normal faults trending northwest-southeast with some fault segments trending in a more northwesterly or westerly direction. At this level, the deeper part of the basin is towards the northwest or Squid and Pelican general area.

The southeast area, that of the Sea Eagle prospect and Shearwater lead shows limited amounts of faulting. The general area of the A-4 prospect, A-6 prospect, 227 leads and 81-21 prospect also displays limited amount of faulting. This may indicate that these prospects and leads were already in-place by Paleocene L. balmei (unconformity) horizon time and that limited structural activity took place at this horizon time. The Chat prospect area displays more faulting both in the northwest direction and north or northeast direction. It is now recognized that the northwest trending faults are basin forming faults, while the northeast trending faults are transfer faults, and the north trending faults are conjugate faults to both of the previously identified fault trends.

The Squid area, as remapped after the drilling of the Squid #1 exploratory well, displays faulting to the northwest joined by curvilinear segments to almost west trending faults.

The Tasmanian Devil area is one of subcrop at this horizon level.

Map 3, is a seismic time structure map at the Upper Cretaceous horizon. The scale is 1:100,000. The contour interval is 20 milliseconds. At this map horizon level, the Chat prospect is shown to be a major southwestward dipping tilted fault block, in part horst block. Northeast trending transfer faults are recognized in the down-thrown area, or basinward area, to the southwest. This prospect is located at the boundary between the early developed basin, or rift stage of the basin, to the northeast and the later stage of the basin, or sag stage of the basin, to the southwest.

The Moray lead is a tilted fault block located near the subcrop area of this horizon level.

This map covers a small portion of permit T-16-P. The regional trends are relevant to the evaluation of the T-16-P Permit area.