

Deposition also continued in shallow waters, alternatingly turbulent and quiet. However, in contrast to the Otway, some marine fossils are present and broad lithologic sequences have permitted separation of the several correlatable formations within the eastern portion of the basin. The western portion, notably the thick section in the Mt. Salt well, is more uniform and considerably more sandy and, therefore, cannot be broken down into units correlatable with the eastern area.

The two areas where appreciable thickness of Upper Mesozoic has been found are Mt. Salt No. 1 (more than 6,893 ft.) and the Port Campbell area where it reaches 5,000 feet (from seismic lines near well control). It would appear from the map Thickness Upper Mesozoic (Fig. 15) that contrary to former concept, these two areas are not isolated features but part of a trough extending through the offshore part of the basin. The previous assumption of thin Upper Mesozoic connecting the two thick areas resulted from a northward swing of the line of section passing through the well control points, as may be seen from the cross section Fig. 18.

The Paaratte onshore is mapped as overlapping considerably the older units, and the great thickening in Mt. Salt is attributed to Paaratte.

The offshore pinchout of Upper Mesozoic cannot be detected from the seismic records outside of the Port Campbell area. Here it is best seen on lines SF-35, 26 and 22. The pinchout is manifest by a discordance of dip with the underlying Otway and unconformable dip with the overlying Tertiary. The Tertiary dips south whereas the Upper Mesozoic dips north along with the Otway. The fact that no discordance of dip can be detected in the thick section offshore of Mt. Salt suggests that either the Upper Mesozoic of this area bears a different relationship to the Otway, or the apparent discordance seen in the Port Campbell area is not real.