

analysis in Tarook-1, 8567-9052 feet, Dondu-1, 7626-7783 feet, Yurongi-1, 6991-7110 feet, and Tilana-1 9092-9277 feet. The wells are associated with a shoreface/offshore setting and are characterized by episodic storm and tidal deposits, hummocky cross stratification and bioturbation. Organic residues, core interpretations, and computer rock zonation indicate the presence of a marine influence in the *M. diversus* section of the Konkon-1.

Cores 4 and 5 (*L. balmei* and *M. diversus*) in Pelican-1 and other core samples from the wells Aroo-1, Tarook-1, Bass-3, Nangkero-1, Poonboon-1, Pelican-2, Pelican-3, Pelican-4, Pelican-5 and Narimba-1 are interpreted as delta plain facies. Minor mouth bars, crevasse splays, distributary channels, embayments and floton coals are common in the core samples.

*P. asperopolus/N. asperus*. The *P. asperopolus* interval, Enclosure 32, is characterized by a wide areal distribution of a delta plain/coastal/offshore association. An attenuation of the delta plain facies in *N. asperus* is evident in Enclosure 33. Despite the limited core control in *P. asperopolus* (Cormorant-1, Bass-1, Bass-2, and Pelican-1), a wide distribution of the delta facies is supported by the presence of coals in downhole logs. Coarsening-up log responses similar to those observed in *L. balmei* and *M. diversus* zones are interpreted as lower/middle/upper shoreface sequences. Core samples from *P. asperopolus* and *N. asperus* wells contain shoreface sequences which are characterized by hummocky cross stratification and episodic storm events. The presence of dinoflagellate cysts (Cormorant-1, Bass-3 and Pelican-1), trace fossils Chondrites, Terebellina, Skolithos, Teichichus and Ophiomorpha, and marine shale computer rock zonation in Yolla-1, 6100-6107 feet, indicate a marine influence. With exception of the Cormorant Trough, the apparent deltaic depocenters previously discussed (*L. balmei* and *M. diversus*) persist in the Pelican Trough and to the southeast.

Little data are available in the Upper Cretaceous *T. longus* zone. Core samples from Poonboon-1 are interpreted as prodelta/offshore shales, and cores from Bass-3 are characterized by a series of debris flows into an apparent lacustrine (?) estuarine (?) deepwater setting.

Lower Cretaceous Otway core samples, in the Durroon-1 well, are volcanigenic grey/green sands associated with thick channelized sequences interpreted as grain/debris flows in a submarine fan complex. Rocks with similar physical characteristics were observed in Apollo Bay outcrops and in the onshore in Anglesea-1 core samples.

Based solely on primary structure and depositional sequences, the classification of delta type(s) is tenuous. Many of the criteria used to identify tidal processes in outcrop are not recognizable within the scale of core. Despite the recognized wave generated bedforms (hummocky cross stratification, ripples, etc.) in the shoreface settings the influence of tidal processes cannot be discounted. The effects of structure on deposition in the basin and the areal distribution of specific facies are not fully understood. This is particularly true for the *L. balmei* and *M. diversus* intervals. Tidal processes should be important within a marine influenced Cormorant Trough graben. In addition, the distribution of facies (Enclosures 30, 31, 32 and 33) suggest that the morphology of the