

7.

One example is depicted by Figure 3, which is a schematic representation of brown coal seams developed in a narrow linear belt adjacent to a basement high. It shows the development of successive coal seams at times T_1 , T_2 and T_3 , and that coal seams split and thin with increased distance away from the basement high. The thickest brown coal seams are developed closest to the basement highs.

The first brown coal seam develops at time T_1 . This is followed by a period during which predominantly inorganic detritus is deposited. At time T_2 a stratigraphically higher coal seam develops. Similarly the thickest coal is developed closest to the basement high. This trend, whereby development of stratigraphically successive brown coal seams parallels the basement contours, occurs in relatively unrestricted areas of the Launceston Basin. That is, not in a sub-basin entirely bounded and constrained by basement highs.

The second trend of brown coal seam development occurs in restricted sub-basins that are constrained and bounded by basement highs. This trend is thought to occur in the Pipers Lagoons sub-basin. As the sub-basin infills with detritus, younger brown coal seams are developed away from the sub-basin margins towards its depocentre. Seam 1 of the Pipers Lagoons sub-basin, which is only developed between boreholes C022 and C033, is such an example. However, the upper seams in this sub-basin have been partly removed by erosion.

4.1.2 Re-Appraisal of Seam Correlations and Seam Nomenclature.

Correlation of brown coal seams has been made by use of characteristic down hole geophysical log signatures, and geological cross sections. The most distinctive geophysical log signatures are the Gamma and Density logs of Seam LBO of the Loatta Sub-basin and Seam PCO of the Pipers Lagoons Sub-basin.

Coal seams have only been correlated between drill holes within their respective sub-basin. There is insufficient information available to correlate seams between the various sub-basins.

It was stated in Ellis, (1982) that correlation could be made between Seam 3 (now LBO and LCO) of the Loatta sub-basin and Seam 3 (now PCO) of the Pipers Lagoons sub-basin. This is not considered to be the case following the evaluation of geophysical log signatures now available from the 1982 exploration programme. Major changes to seam correlations have been made in the Loatta sub-basin.