

BASS BASIN STRUCTURAL CONFIGURATION

Extensive seismic coverage across the basin was acquired during 1984 and 1985. This coverage is illustrated on Enclosure 60, Appendix A as the TQH series and TNK series seismic lines. These series of seismic data are available in a half-scale squash-plot format. Seismic lines in this format were used to correlate palynologic data across the basin (Appendix A). Each of the detailed palynologic intervals was correlated into the seismic data across the basin. The correlations are intended only to follow the generalized palynologic surface. The correlations account for obvious faulted seismic reflections, but do not detail fault configurations. The correlations can only highlight the broad fault basin boundaries in areas of limited palynologic control. The correlated squash-plots and the isopach maps generated from these correlations (Enclosures 4, 5, 6, 7, and 8) are presented as only generalized shapes and trends of the basin configuration. The squash plots are found in Appendix A.

The *N. asperus* interval is the lower Middle *N. asperus* and Lower *N. asperus* or Top of Eastern View Coal Measures to Top of *P. asperopolus*. Volcanic intervals in the wells are highlighted in fluorescent orange on the squash plot lines.

The reliability of the palynologic data age equivalency through graphic correlation composite standard technique on eight Bass Basin wells was completed after the interpretation of the basin configuration and the thermal history modeling of this configuration was completed. This chronostratigraphic correlation is presented in Appendix D. The evaluation established that the top of *L. balmei* is a reliable time marker. The other palynologic intervals are less reliable as time markers but the fluxuations do not significantly alter the basin configuration interpretation.

The most reliable correlations, due to the surrounding well control, are presented on squash plot BB. The total interval thickness of the *N. asperus*, *P. asperopolus*, *M. diversus* and *L. balmei* increases abruptly south of the Bass-2 well with additional expansion north of the Bass-2 well. The Bass-2 well penetrated volcanics near the bottom of the well but a terminal core found tuffaceous mudstone at the total depth of 9,010 feet and is interpreted not to have penetrated basement. The reflectors near T.D. are more likely an expression of the lateral extent of the volcanic interval. The palynologic intervals are downthrown south of Dondu-1 with minor expansion, and are a constant thickness to the south toward Pelican-3.

The palynologic interval thickness of Pelican-3 is illustrated on squash plot DD. The Pelican-3 well is slightly thinner in the *N. asperus* and *P. asperopolus* intervals than the well control to the north and is significantly thinner in the *M. diversus* interval. The Pelican-3 well penetrates upper and middle *M. diversus* section before penetrating upper *L. balmei*. The Pelican-3 area is interpreted to have been high during lower *M. diversus* deposition, a lower *M. diversus* unconformity being