

Abstracts of Additional Hydrocarbon Session Papers

Burial and Thermal Geohistory Analysis at Passive Continental Margins

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Burial geohistory analysis involves progressive stripping of sediment bodies defined by well chronostratigraphic horizons. Underlying section, to basement, is corrected for compaction effects and paleo-water-depth, and plotted as a "paleowell" section in a time-depth framework. The procedure is amenable to computer processing.

Given a tectonic model for basin subsidence, a theoretical paleobent flow function can be applied to the calculation of integrated thermal and maturation history of the well section as a function of time and depth. The procedure may be extended to cross sections providing migration direction

relative to trap formation. Our examples, from the southern and southwestern margins of Australia, illustrate these

applications, and provide constraints to passive margin formation processes.
