AAPG Annual Meeting March 10-13, 2002 Houston, Texas

Anthony R. Holden¹, John M. Jacques¹, Heather Clegg¹, Carl C. Palmer¹ (1) Robertson Research International Ltd, Llandudno, United Kingdom

Mexican Petroleum Systems - Past Success and Future Potential

A process driven, multidisciplinary assessment of Mexico's producing areas, as part of its TELLUS global new ventures project, has recently been completed by Robertson Research International, digitally capturing the petroleum systems and play fairways operating in Mexican, US and Cuban basins bordering the Gulf of Mexico (GOM).

Mexico's production has historically come from onshore and shallow offshore fields, largely reservoired in fractured Cretaceous and Paleocene carbonates, with additional production from Tertiary deltaics. Principal source rocks are Upper Jurassic, Cretaceous and Tertiary shales. Trap types include: reefal developments, anticlines created during the Laramide Orogeny and the Chiapas Foldbelt event, syn-depositional rollovers formed during the Tertiary, and Oligocene to Pleistocene salt-related traps in the Salinas - Sureste Basin.

As many of the onshore areas approach exploration maturity, attention is gradually beginning to focus on the largely unexplored offshore arena, where large structures, abundant seeps and a thick stratigraphic section are promising indicators of potential. The salt province of the Campeche Sub-basin offshore may be partly analogous to the proven US GOM sub-salt province and the prolific Upper Cretaceous to Paleocene carbonate talus reservoirs of the Cantarell Complex and adjacent fields may extend further than currently recognized.

The emerging picture is one of significant potential where companies experienced in deeper water and subsalt exploration who have a clear understanding of the regional geology will be well placed to take advantage of the opportunities that may arise.