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## **GETTING THE MOST OUT OF THE INGLEWOOD OIL FIELD, LOS ANGELES, CALIFORNIA**

The Inglewood oil field located along the Newport-Inglewood Fault trend in the Los Angeles basin has undergone several phases of development since its discovery in 1924. The initial development was followed by waterflooding in 1954, and by 1986 the field was rapidly maturing with increasing water-cuts and expenses. In 1990, Plains Exploration & Production acquired the field. Fieldwork focused on production engineering and facility issues. An effort was initiated from 1993 to 1997 to study and identify by-passed oil, current hydrocarbon saturations. Results from drilling new wells indicated that geologic structure was a dominant factor in accurately identifying areas in the reservoir with these reserves.

In early 2001, Plains initiated a significant effort to resolve the structural complexity of the Inglewood Field, to characterize the reservoir, and exploit hydrocarbons that were under-developed in the past, or had not yet been identified. The current development strategy is a systematic effort starting from the shallowest zones to the deepest. The shallow reservoir zones, the Vickers and Rindge reservoirs, consist of the Pliocene aged Pico and Repetto formations which have been undergoing a waterflood since 1954. Implementation of this development strategy involves detailed mapping of the geological structure and determining fault geometries to realign the waterflood patterns in the Vickers and Rindge reservoirs. Success in recent drill wells over the past 2 years have validated the need to understand the complex faulting as well as the turbidite rich stratigraphy. In addition to basic mapping and accompanying data base issues, much attention and effort is being given to reservoir characterization and attempting to acquire seismic data over the field in preparation for a detailed evaluation of the deeper reservoir zones.