

TECTONIC SETTING IN THE REGÊNCIA PLATFORM THE ROLE OF TRANSFER ZONES - ESPÍRITO SANTO BASIN – BRAZIL

STIRLING, R. A., FRANÇA, R. L. and FONTES, F. T. , Petrobras/E&P, São Mateus, Brazil

Petroleum exploration in the Espírito Santo basin, southeastern Brazil, has benefited from the extensive use of 3D seismic surveys. Improved imaging of its sedimentary fill has revealed a complex structural framework developed as early as the Brasiliana Orogeny, until Recent, as defined by seismic maps and time slices and corroborated by satellite images. The objective of this work is to show the key role that Transfer zones play in the basin's petroleum system. The Brasiliano Orogeny, Serra do Mar uplift, the development of the Colatina Cataclastic belt and the emplacement of the offshore Abrolhos volcanic complex have interacted or influenced the development of roll-over structures, generated during the extensional regime phase of this passive Atlantic margin basin, resulting in a complex structural pattern. Careful analysis of 3D seismic and well data indicate that the different stress fields originated in those different tectonic events are constantly reactivated, with variations both in intensity and timing. Drainage patterns, among other evidences, indicate that such processes are still taking place. Therefore, the study of the basin's Neotectonics has become an important tool in better understanding its onshore and offshore Petroleum Systems.