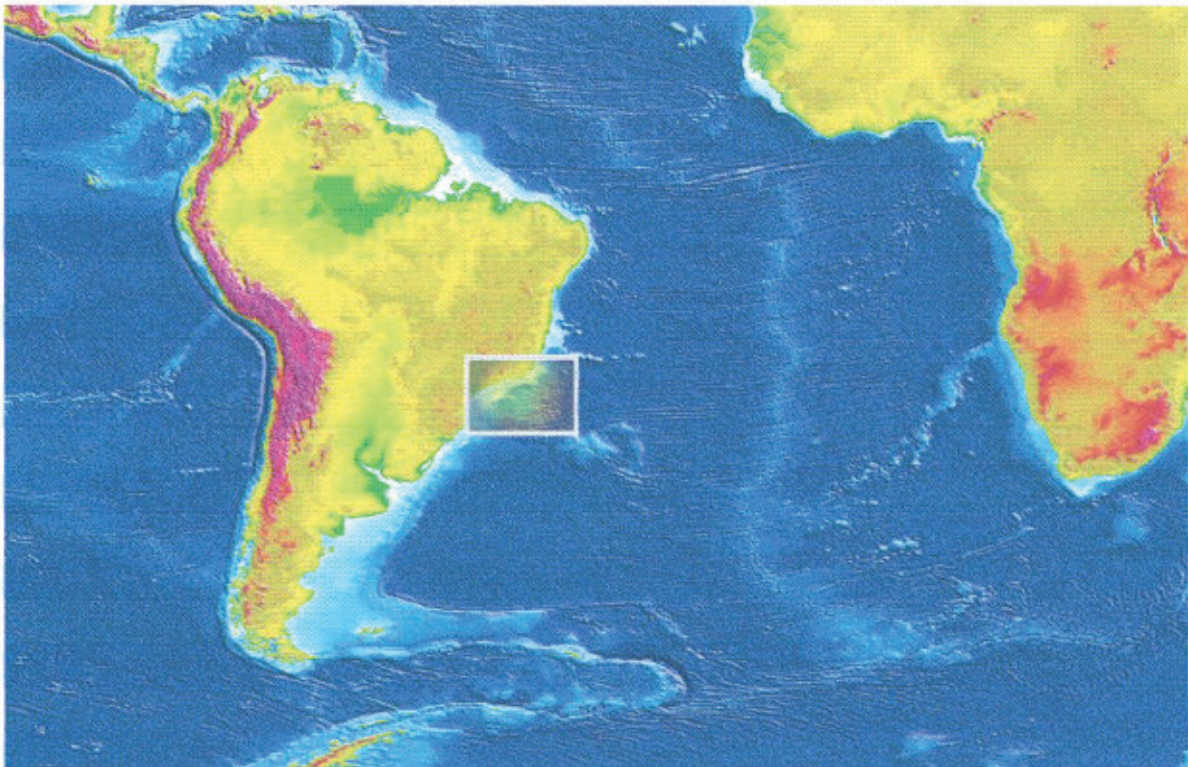


# Petroleum Systems of the Southeastern Margin of Brazil

## Santos and Campos Basins



Integrated Studies by:



PETROLEUM SYSTEMS OF THE  
SOUTHEASTERN MARGIN  
OF BRAZIL,  
SANTOS & CAMPOS BASINS

*Multiclient project*

*By*

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## **EXECUTIVE SUMMARY**

In the following sections of this report, the structural, sedimentological and tectonic framework of the major petroleum basins of the Brazilian Eastern Margin will be discussed. Then, the results of the detailed geochemical analyses of representative oils are shown.

This project had the objective to analyze and characterize by means of high-resolution geochemical technology (HRGT) the main petroleum systems that occur in the Santos and Campos basin, southeastern Brazil. Forty-five oil samples from the Santos basin and one hundred and thirty five oil samples from the Campos basin were analyzed in this project. The geochemical parameters obtained during this study were closely adjusted to the geological evolution of the basins, in order to improve the accuracy of the physical-chemical interpretation of the results. In this report, the conclusions obtained for each petroleum system of each basin are linked to descriptions of the petroleum systems element characteristics and main geological processes involved.

The Santos basin shows the occurrence of two main petroleum system types: one derived from a continental environment, such as a brackish-saline lacustrine source rocks related to the rift section, and a marine one that can be correlated with the Albian-Cenomanian and Turonian sections. The spatial distribution of both systems suggests that the southern area of the basin favors the occurrence of the marine system, whereas the northern part shows a relative abundance of the lacustrine type.

The analyzed oils from the Campos basin appears to be related to the lacustrine source (rift section), although they also show distinction to be related to a few oil family types. Some analyzed oils showed a marine origin.

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