

Basin Overview

The North Caribbean Basin is the northernmost sedimentary area of Colombia. It extends from the northernmost point of the Guajira Peninsula to the Santa Marta Bay in the southwest.

Shallow offshore is considered to have water depths from 0-600 feet. Source rock could be the Castilletes Formation deposited in the deeper and more subsident part of the basin. The main reservoir rocks are carbonates buildups, Tertiary basal sandstone and submarine turbidites. Migration of hydrocarbon from the deep offshore is enhanced by the structural configuration. Hydrocarbon accumulation has been proven in the shallow offshore (0'-600') by production in the Chuchupa and Ballenas gas field. In addition, westward of Santa Ana-1 well geochemical analyses on offshore piston cores, resulted in the identification of thermogenic gas and oil in such samples.

At least three plays are present over the area. The giant Chuchupa gas field produces from the basal sandstone play. The carbonate play is producing in the shallow offshore Ballena field. The deep offshore great than 600 ft of water is very probable the area for the Miocene fan play.



Seismic Profiles



Infrastructure

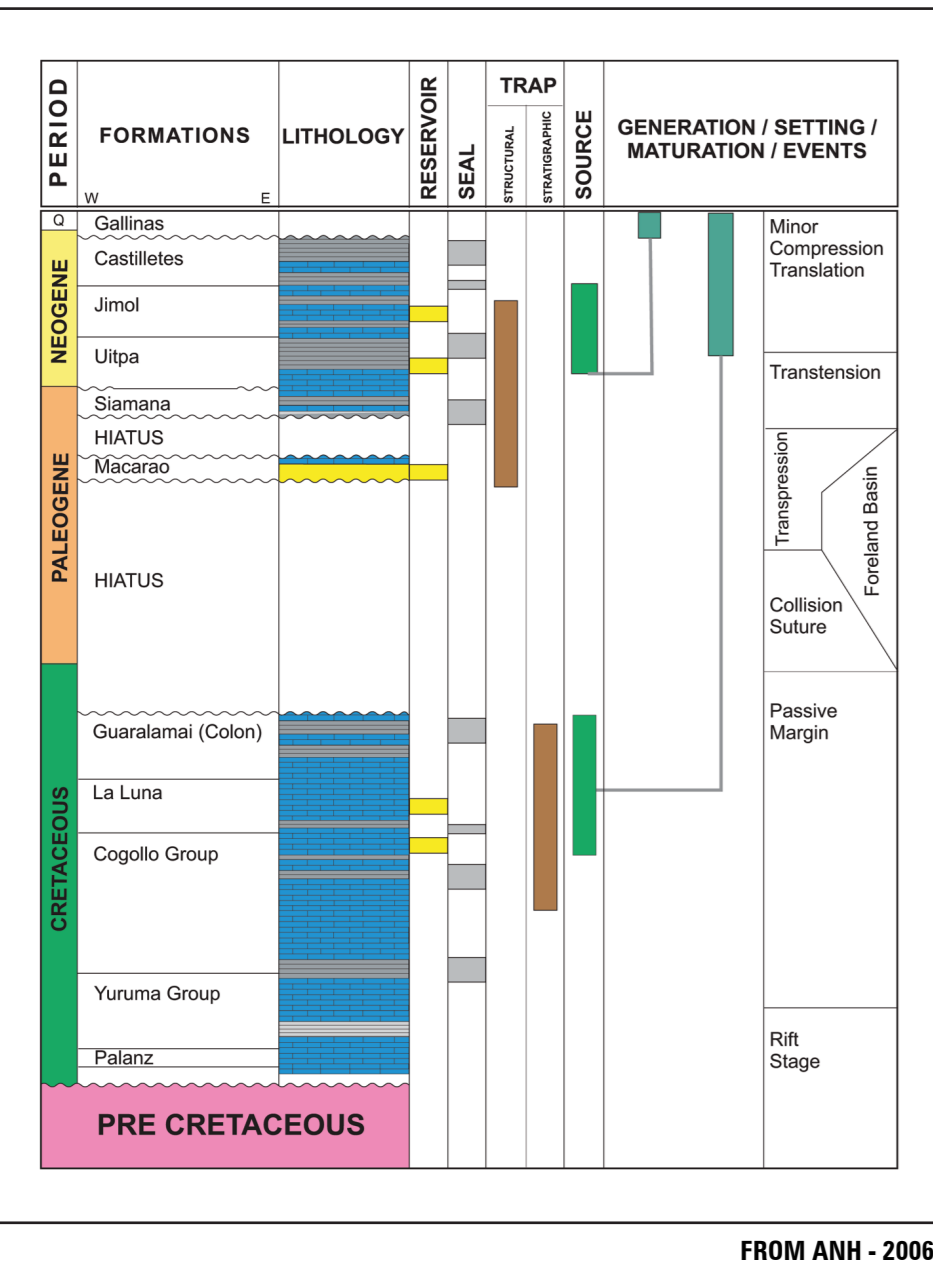


Highlights

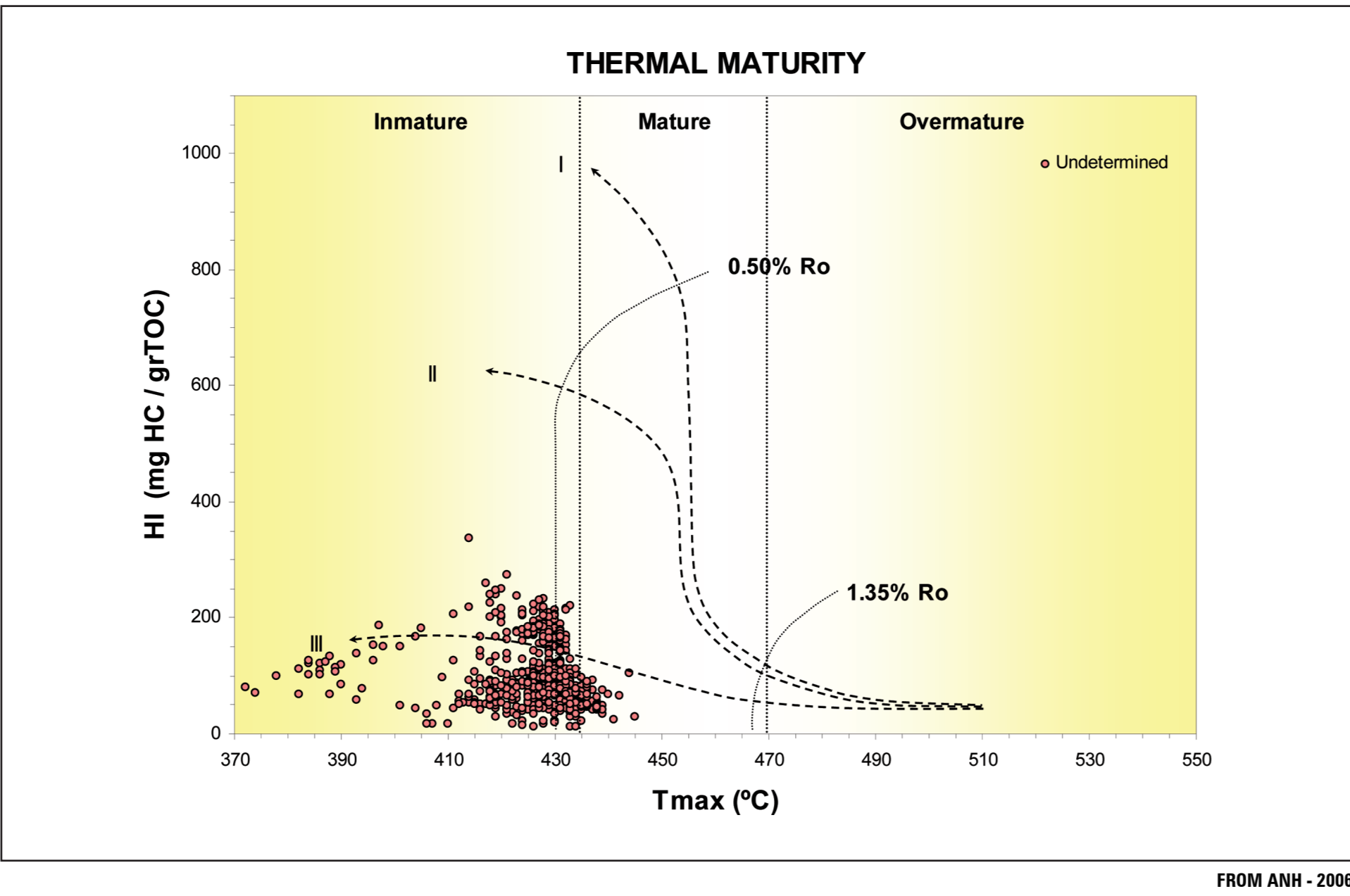
Basin type	▶ Transtensional Margine
Area	▶ 35.000 km² / 19,000,000 acres
Wildcats wells	▶ 34 (North and South Domain)
Gas discoveries	▶ Chuchupa (4.0 TCFG)
2D Seismic	▶ 13.545 km (North and South Domain)
Source Rocks	▶ Cretaceous and Neogene Catilletes Shales
Reservoir Rocks	▶ Tertiary Basal Sandstone and Miocene Carbonate Buildups
Seal Rocks	▶ Tertiary Shales
Hydrocarbon type	▶ Thermogenic Hydrocarbons

Stratigraphy and Petroleum System

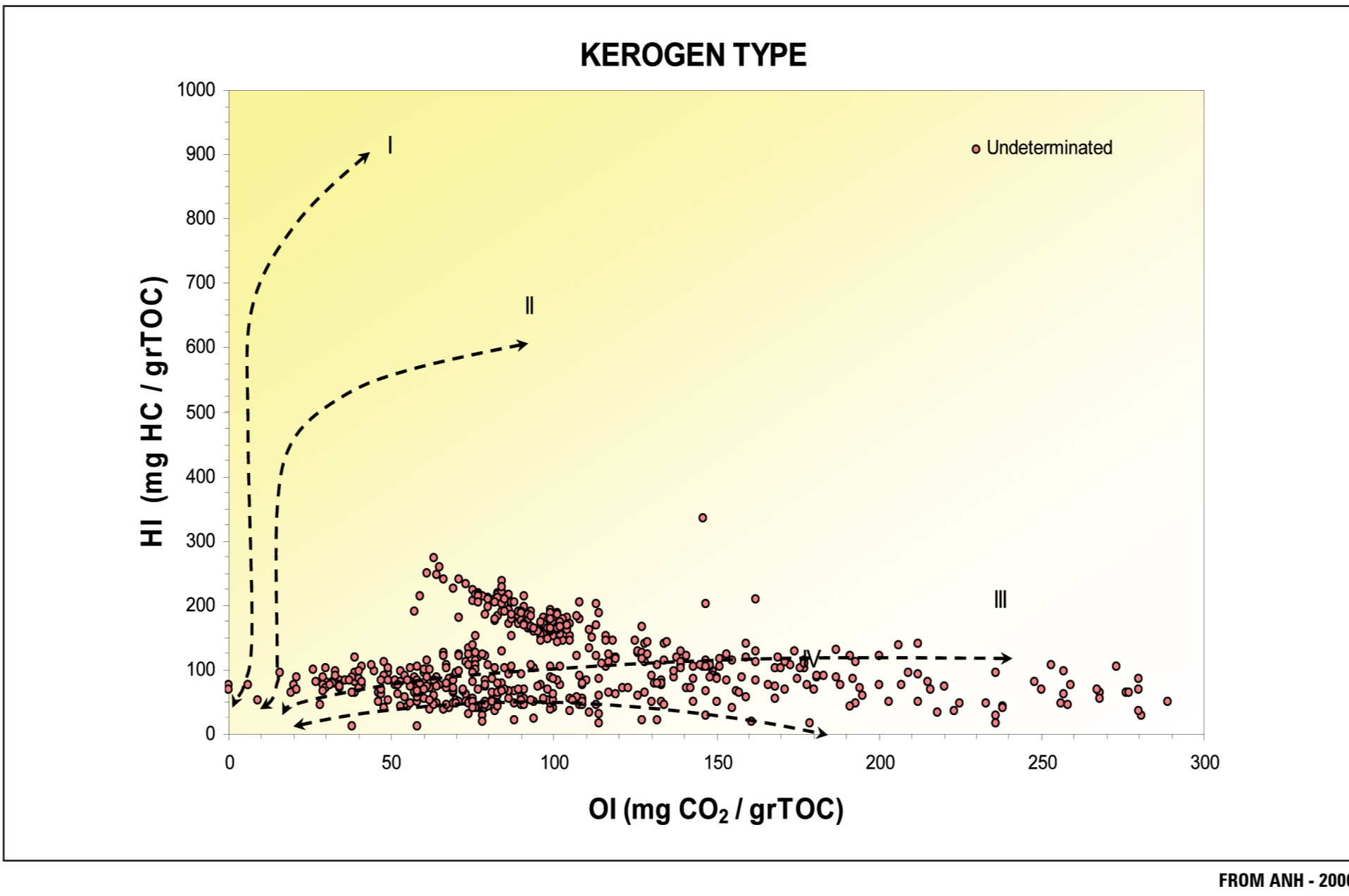
Petroleum System Chart



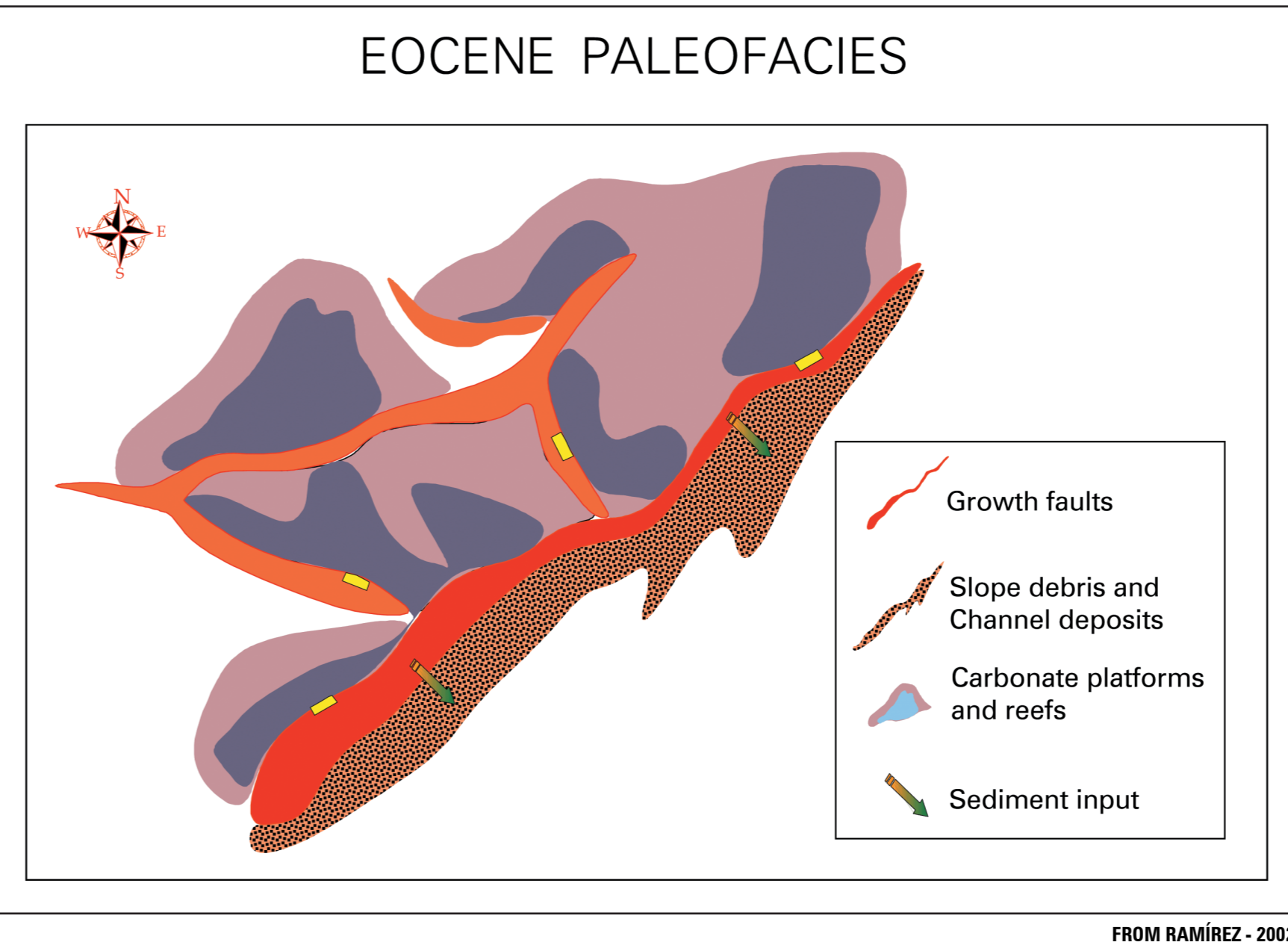
Thermal Maturity



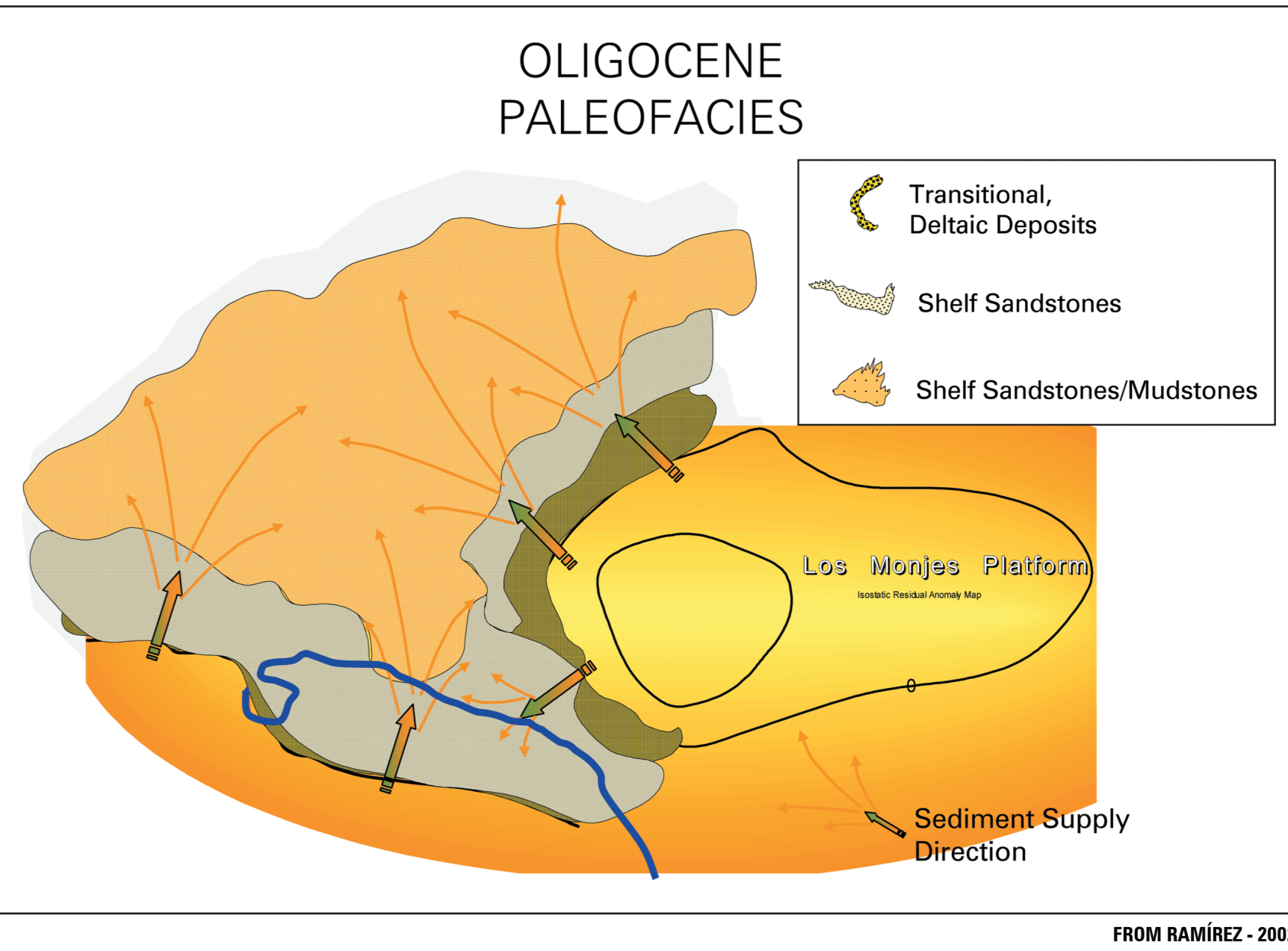
Kerogen Type



Reservoir Distribution

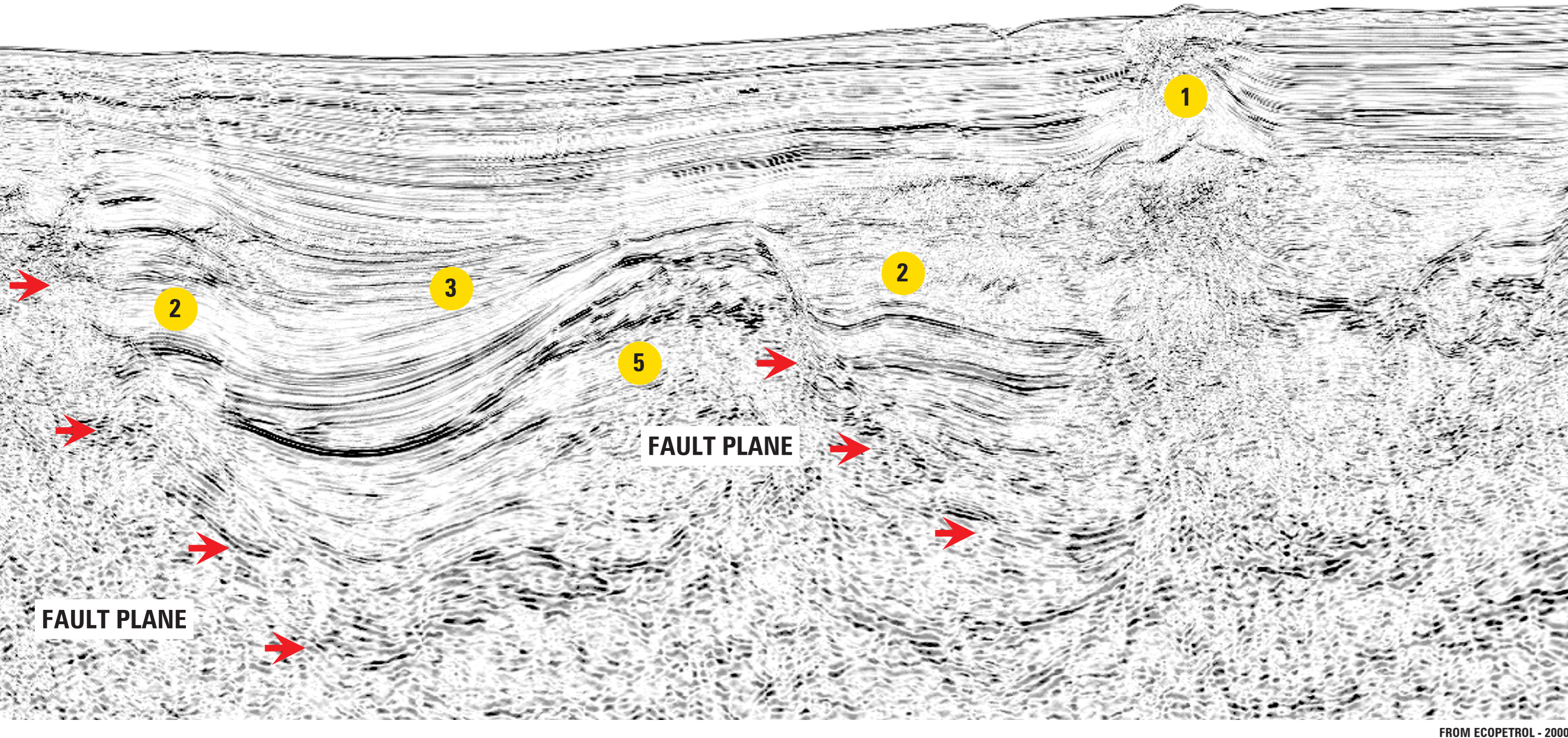


Reservoir Distribution

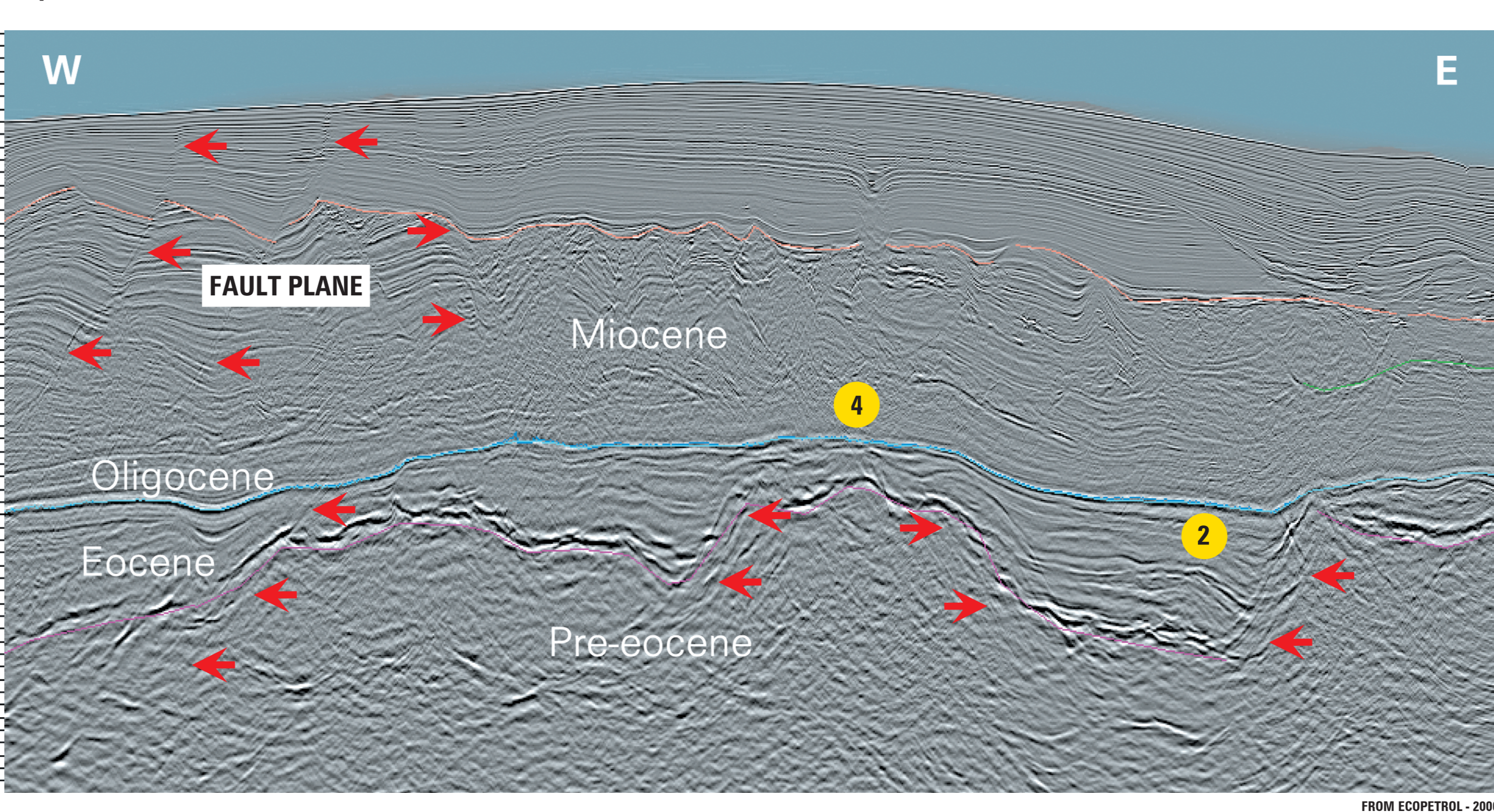


Plays and Effective Traps

Combined Traps



Trap Associated with Extensional Faults



Direct Hydrocarbon Indicators

