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**Diagenesis and Fracturing Effects on Sandstones Reservoir Quality in Wells Located in the Tacata and Zacarias Areas, Eastern Venezuela**

Very few work have been addresses to reservoir quality naturally fractured clastic reservoir in Venezuela, also within the study area. Core samples from three wells located within the Tacata and Zacarias area were used to perform two fold objectives. First, to asses the petrographic characterization of the fracture system (Capaya, Oficina and Merecure formations) and second the estimation of the potential permeability contribution to the flux fluid system. Reservoir rock characterization was carried by conventional petrography and scanning electron microscopy combined with catodoluminescence detector (SEM-CL), secondary electron detector (SEM-SE) and disperse energy detector (SEM-EDS). Different measurements were made (porosity, type and abundances of cements, relative timing of cements, timing between fractures and diagenetic processes) using imaging analysis from secondary electron and catodoluminescence images. All the samples (15) contain natural fractures having differences in cements, apertures and relative timing of the cements. On one hand, the samples show a prekinetic history, which consist mainly by quartz, kaolinite and carbonate cements; however, the intensity of these processes has been such that most of the porosity has been dramatically reduced. On the other hand, the postkinetic history is more complex and more variable in mineralogy (quartz, kaolinite, barite, pyrite gypsum, apatite and carbonate cements). In spite of this complex cementation pattern, fractures are partially to totally open. Calculations of the apparent fracture permeability allowed us to conclude that the main control in the fluid flux will be the fracture aperture.