

## **Fracture Modeling of the Main Limestone Reservoir Rocks, in the Kirkuk Anticline in Kurdistan- N. Iraq**

**Shirzad B. Nazhat<sup>1</sup>**

<sup>1</sup>Soran University

### **ABSTRACT**

Fracture modeling of the Main Limestone reservoir rocks, in the Kirkuk anticline in Kurdistan- N. Iraq This study describes the fractures and other related features observed from eighteen thousand feet of core, covering the Main Limestone section(Eocene/Paleocene-Oligocene) of the Kirkuk Anticline, in Kurdistan-North Iraq, with emphasis on fracture orientation, frequency, type, pattern, vugs, stylolites, and macroporosity. The results confirm that the kirkuk structure is extensively fractured and that good fluid connection exists along the longitudinal axis of the structure. Less fluid connection is observed across the structure. Total tension strike fracture sets are twice the total tension dip sets and about the total opened diagonal sets. Vertical and nearly vertical fractures are the most dominant; also filled and closed fractures are frequent in the basinal units, in contrast to non-basinal units where fractures are the more frequent type.