

In order to optimize the productivity of the Mishrif formation in the Al-Fakkah field, this investigation suggests the implementation of a Hydraulic Acid Fracturing treatment. The Mishrif formation's productivity has been substantially enhanced by this comprehensive approach. The maximum horizontal stress extends in a direction ranging from NE 20–80 degrees. To evaluate parameters such as fluid efficiency and fracture complexity, the MiniFrac treatment entailed injecting 150 barrels of #30 cross-linked gel at a rate of 25 barrels per minute, followed by an overflush with 30# linear gel. The paper meticulously documents all procedures before and after the treatment, emphasizing the importance of meticulous oversight to ensure safety, efficiency, and comprehensive documentation. Acid fracturing, a prevalent method for low-permeability limestone reservoirs, is advised.