Fracture Characterisation and its Significance in Production from Unconventional Fractured Deccan Trap Reservoir, Padra Field, Cambay Basin, India.

Sushil Kumar, D. Mohan, A. Ahmed, and B. S. Dhannawat

Forward Base Ankleshwar, ONGC, India sushilsingh72@gmail.com

Padra field, located in eastern margin of South Cambay basin, is famous for oil and gas production from unconventional fractured Deccan trap reservoir. More than 70 wells are drilled in the field, and oil gas production is contributed from trap, Olpad and Ankleshwar Formations. It is well established fact that the reservoir porosity, permeability and hydrodynamic behaviour in trap are attributed to natural fractures present in it. Almost all the wells producing from trap are barefoot completions (100-150m) and are average to poor producers, and except few wells, all are on SRP. A wide variation in well performance is observed in near by wells in the field, and it is the primary issue for development programme and exploration.

In this article relationship existing between production character of wells and natural fracture systems is studied. Natural fracture analysis is done by utilizing field level faults, FMI logs recorded in recent wells and few conventional cores from trap section.