

Deployment of High Performance Packer Hppk-Da (Certis) in Eni Pakistan

Hassan Nazir Raja¹, Anwar Rashid¹, Vincenzo Mittiga², Sumair Ahmed², and Muhammad Adnan²

¹Schlumberger Seaco Inc.

²Eni, Pakistan

Abstract

The decline of the conventional resources and growth of industries worldwide are pushing governments to look into new horizons of energy. Drilling deeper into formations to explore hydrocarbons in extreme pressure and temperature conditions makes it difficult to utilize the services with conventional tools in such environments. Schlumberger has developed the HPHT Quartz Gauges (THQR) and high performance packer (CERTIS) which can cater to the aforementioned challenges, with a simplified tool string and robust design specifications.

As an initiative to explore new energy resources, Eni planned operations to develop hostile HT ultratight gas formations. Eni chose to test the ultratight gas formations before beginning its planned multiple hydraulic fracturing operations. The test string would require sturdy, vigorous downhole equipment designed to withstand challenging downhole conditions, including high bottomhole temperatures with high maximum pressure differential pressure and well deviation of 31°.

Considering the extreme reservoir conditions as well as the rigorous test design, the importance of using robust downhole reservoir test technologies in a simplified string design was of paramount importance.