

ALBANIA

Reservoir	Low-pressure, heavy oil with more than 50% free gas
Environment	Onshore

Background

An operator was using conventional progressive cavity pumps (PCPs) in a heavy oil field with high levels of free gas. Average run life was just 133 days despite use of gas separators, and the frequent changeouts were increasing opex to unacceptable levels.

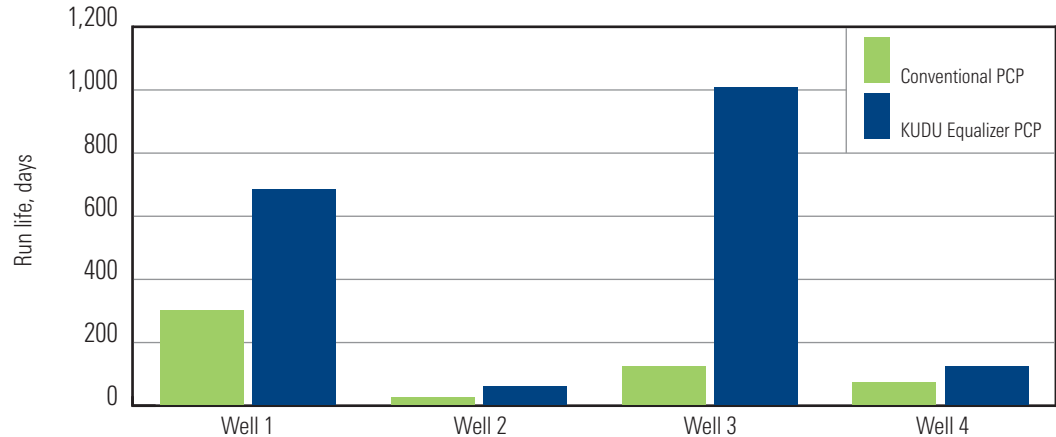
Schlumberger proposed its KUDU Equalizer PCP, which is especially effective in wells with high gas/liquid ratio (GLR), low reservoir pressure, or high-viscosity fluids. Unlike conventional PCPs, it achieves optimal pressure distribution throughout the pump while stabilizing the temperature, controlling slippage rates, and compensating for compressed gas volume. These features serve to protect the pump, including elastomers, and prolong run life.

Technologies

- KUDU Equalizer PCP

Progressive Cavity Pump Run Life More Than Triples in Heavy Oil Field with High GOR

Innovative design improves pressure and temperature profile across pump stages, significantly reducing stress on components



Average PCP run life in four wells equipped with the KUDU Equalizer PCP increased by 254%, from 133 to 471 days. Longest run life achieved was 1,010 days versus the previous best of 304 days.