MATURE FIELDS

UNCONVENTIONALS

CASE STUDY

Slimline ESP System Achieves 400% Increase in Pressure Drawdown Compared to Gas Lift

OPERATOR RELIABLY PRODUCED MORE OIL AND LENGTHENED RUNTIME WITH UNIQUE ESP SLIMLINE PUMPING SYSTEM

LARAMIE COUNTY, WYOMING

CHALLENGE

- Gas lift system could not draw down intake pressure below 1600 psi
- Slim casing size limited downhole equipment options

SOLUTION

Slimline ESP system to replace gas lift system included:

- Tiger Shark® II pumps
- Liberator™ gas separators
- Corsair™ motors
- Defender® seals

RESULT

- Decreased pressure drawdown to below 400 psi
- Exceeded runtime expectations by 3x

REDUCED PRESSURE DRAWDOWN **BELOW** 400 PSI

OVERVIEW

Efficient movement of production fluids to the surface requires low intake pressure (drawdown). Gas lift systems rely on high levels of formation gas pressure to reduce downhole fluid density and move fluids to the surface. When there is insufficient gas downhole, compressed and reinjected gas must be pumped in from the surface to energize fluids coming from the reservoir.

CHALLENGE

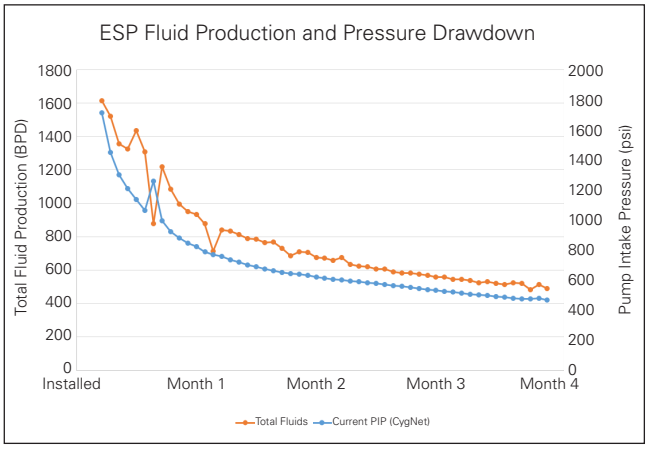
A gas lift well in Laramie County, Wyoming was not effectively lifting oil. The gas lift system could not drawdown the well below the flowing bottom hole pressure of 1600 psi. The well also had a low gas-to-oil ratio (GOR), limiting downhole gas available for lifting. Complicating matters, the casing size limited the equipment that was installed.

SOLUTION

Summit ESP® – A Halliburton Service installed a slimline ESP system to replace the gas lift system. This system included 3.38" OD Tiger Shark® II pumps, tandem 3.75" OD Corsair™ motors, Liberator™ gas separators, and Defender® seals. The slimline system can operate in both low and high GOR conditions. Each motor provided an impressive 100 horsepower in a slimline configuration. The system was built, tested, and shipped to location within the targeted deadline, demonstrating our commitment to customer service excellence.

RESULT

New equipment arrived on site within days, allowing the operator to put the well back into service with minimal downtime. The slimline ESP system effectively produced fluid from a flowing bottomhole pressure from 1600 psi to 400 psi, dramatically outperforming gas lift. Runtime exceeded expectation, running four times longer than projected.



SUMMIT ESP
A HALLIBURTON SERVICE

Halliburton.com/SummitESP

HALLIBURTON