

BAKKEN FORMATION

Location	Bakken Shale
Temperature	184 degF [84.44 degC]
Pump setting depth	8,860 ft [2,700 m]
Casing size	7 in [17.8 cm]
Casing weight	32 lbm/ft [47.6 kg/m]
Well depth (MD)	15,200 ft [4.63 km]
Motor OD	4.56 in [11.58 cm]
Pump OD	4.00 in [10.16 cm]

Background

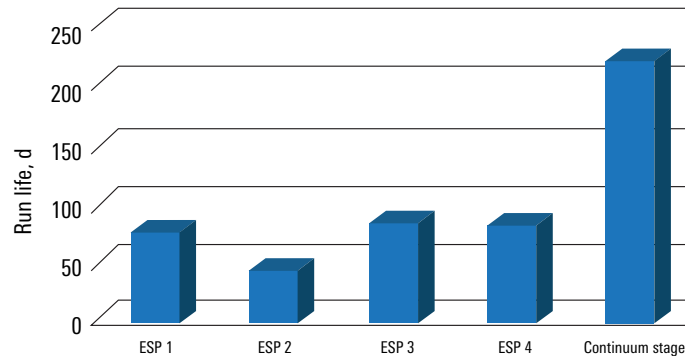
After multiple ESP system failures in an unconventional well, a customer needed to extend run life while improving production. With high solids content and transient flow, the environment challenged conventional ESP systems, which achieved only 20% to 40% of the expected run life.

Technologies

- REDA* Maximus* electric submersible pump system
- REDA Continuum* unconventional extended-life ESP stage
- MGH* multiphase gas-handling system
- Phoenix xt150* high-temperature ESP monitoring system

REDA Maximus ESP System with REDA Continuum Stages Increases Run Life by 500% in the Bakken Shale

Customer experiences continuous production down to 200 bbl/d using one ESP system



A Maximus system was engineered for the well with Continuum stages, fit-for-purpose motor and protector, helicoaxial MGH system, and Phoenix xt150 system with gauge. The system was preconfigured and ready for immediate installation at the wellsite, saving rig time and mitigating the risk of motor contamination or human error during equipment assembly.

The system improved run life more than 500% and continued operating even as production declined to 200 bbl/d, avoiding four workovers and the associated costs of new equipment and deferred production.