

Temperature	453 degF [234 degC]
Pump setting depth	2,023.62 ft [616.8 m]
Casing size	7 in [17.8 cm]
Casing weight	26 lbm/ft [38.7 kg/m]
Motor OD	5.62 in [14.3 cm]
Pump OD	5.38 in [13.7 cm]

Background

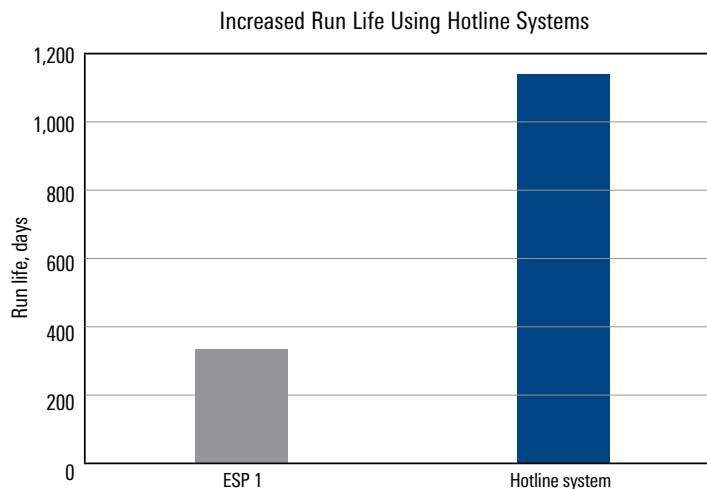
In order to liquefy oil sands to enable hydrocarbon movement toward the wellbore, an operator was performing steam-assisted gravity drainage (SAGD), which involved pumping high-temperature steam into the reservoir. However, this high temperature can compromise conventional ESP run life. Considering that the expected reservoir recovery was directly related to the injection temperature, the operator needed to install a high-temperature system that could withstand the heat and improve recovery and run life.

Technologies

- REDA* Hotline* high-temperature electric submersible pump systems
- Bottom-feeder gas separator
- High-temperature integrated gauge

REDA Hotline System Improves Reliability and Run Life by More than 222% in Canada

System ran for 1,174 days in high-temperature well and continues to run



The Hotline system was installed with a high-temperature, non-weather-dependent integrated motor, downhole monitoring gauge, bottom-feeder gas separator, and high-temperature pump. The motor was configured for immediate deployment in the well, eliminating the risk of human error and saving rig time during assembly.

The Hotline system ran for 1,174 days—a 222% improvement over the previous ESP—and is still running. This improved the operator's total cost of ownership by eliminating unnecessary work and production deferment.