

Production Life Cycle Management Service Eliminates 1,195 Wellsite Visits in South American Field, Saving a Total of 26,141 Miles

A mature field in South America required frequent wellsite visits; Lift IQ service optimized performance and reduced field visits by 23%, saving 497 work-hours

The Lift IQ* production life cycle management service enabled remote surveillance and interventions, eliminating 23% of field visits, reducing field crew mileage by 26,141 miles, and saving 497 work-hours during a 29-month period.

The operator's goal

An operator in South America had a challenge to reduce the number of wellsite visits required to monitor, maintain, and optimize lift system efficiency and run life.

What was tried first

The mature oil field has seven active rigs and more than 230 artificially lifted wells fitted with ESPs, sucker rod pumps, and hydraulic pumping units. Challenging downhole conditions include pump-setting depths <10,000 ft, operating temperatures >300 degF [>149 degC], and gas and solids production (e.g., scale, paraffin, and asphaltene). The difficult conditions combined with the large number of artificial lift systems necessitated frequent wellsite visits.

With an average interwell spacing of 22 miles and the numerous variable-speed drive (VSD) configuration and frequency changes required for optimal operation, field staff were traveling more than 87 miles on average per 12-h shift. The physical impossibility of resolving all critical events in a timely manner resulted in shutdowns, delayed restarts, and production deferment. Hazardous driving conditions—including night driving—increased HSE risk and compounded the challenge.

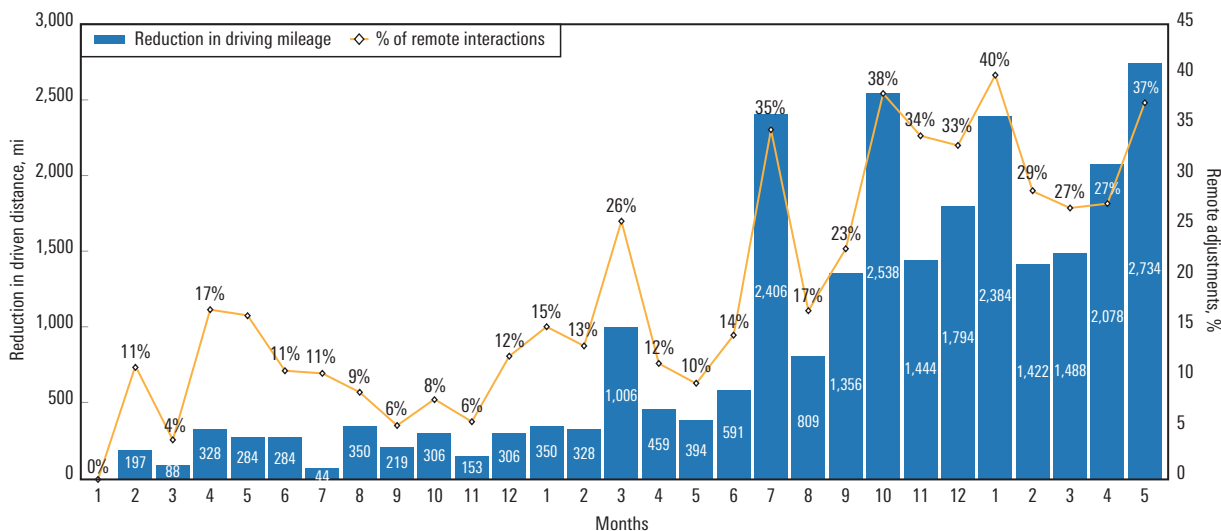
What Schlumberger recommended

Lift IQ production life cycle management service enables remote monitoring and intervention and provides operators with 24/7/365 remote monitoring and intervention services via reliable, secure data-acquisition and transmission hardware and control systems and the Schlumberger Artificial Lift Surveillance Center (ALSC) in Bogota, Colombia. Experienced engineers detect abnormal trends, recommend preventive and corrective measures, and remotely adjust ESP parameters in real time to prevent shutdowns, extend equipment run life, and maximize well productivity.

What was achieved

The operator and Schlumberger personnel established clear channels of communication to streamline resolution of field requests. Multiple VSD configuration changes, such as incremental adjustments to drive frequency for optimal production, were accomplished remotely—much faster than previously possible.

During a 29-month period, 1,195 VSD adjustments—23% of the total—were remotely implemented with the Lift IQ service. As a result, field staff drove 26,141 fewer miles, including 10,631 fewer miles at night, saving a minimum of 497 work-hours. Efficient operational procedures and close cooperation between the operator and Schlumberger have significantly improved performance without the economic impact of increasing field crews.



Throughout a 29-month period, Lift IQ service reduced field crew mileage by 26,141 miles.

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