ForeSite® Platform
Delivers ROI in 2 Months, Reduces Downtime 30%, Increases Production 2% In 111 Mature Wells

Objectives

- Increase uptime and production for a major mature-fields operator in Sumatra, Indonesia. Consisting of 111 wells—primarily electric-submersible pumps (ESPs) and reciprocating rod lift with variable-speed drives (VSDs)—the asset is prone to frequent failure due to power interruption, ESP surface-system issues, and more.
- Increase personnel efficiency. Current optimization efforts require that field engineers make daily wells site visits, which are not consistently assessible. The remote area has poor roadway access, little infrastructure, and no SCADA connectivity.

Our Approach

- A Weatherford team of production engineers, IT engineers, and technical support relocated to the customer’s facilities to assess the asset and its data needs. They recommended a Cloud-enabled ForeSite production optimization platform and an IoT strategy comprised of GSM (global-system for mobile) units that feed data directly to the home office. Together, this solution provided asset-wide, real-time well monitoring and optimization.
- For Phase 1, the team deployed the ForeSite platform and GSM units to 110 wells. The ForeSite enabled the operator to create new operational workflows to manage the asset by exception. With intelligent alerts and real-time data—including amperage, ESP motor frequency, voltage, and VSD status—the operator optimized personnel efficiency by directing crews as needed while restarting wells remotely following a power outage.
- An initial production overview identified 9 wells with significant uplift potential. The process yielded recommendations to modify the lift strategy, which increased production and operational efficiency CAPEX free.

Value to Customer

- The ForeSite platform delivered a return on investment in less than 2 months by increasing uptime by 30 percent and enhancing production by 2 percent. The solution enabled the operator to manage the asset by exception, delivering incremental revenue of US $2 million on just the first 9 wells.
- The solution enhanced personnel efficiency by 30 percent. It removed the need for daily wells site visits and improved failure response times to only 6.5 hours.

LOCATION
South Sumatera, Indonesia

ARTIFICIAL LIFT TYPE
Electrical submersible pump
Reciprocating rod lift

FORMATION
Kaji-Semoga

PRODUCTS/SERVICES
ForeSite platform
ForeSite services