

ForeSite[®] Production Optimization Platform

Drives \$17.7M in Annual Incremental Value Through Improved Efficiency, Uptime, and Production

Objectives

- Optimize production, reduce downtime, and enhance operational efficiency for a Fortune-500 producer with extensive assets across the USA and internationally. The solution must accommodate multiple forms of artificial lift, including natural flow, rod lift, gas lift, plunger lift, and electrical-submersible pumps (ESPs).
- Install an enterprise-wide, data-agnostic optimization platform that reaches across multiple systems, including third-party software. The solution must leverage historical data and integrate real-time feeds from the existing Weatherford CygNet[®] IoT platform and competitor field-allocation and well-design software systems.

Our Approach

- A Weatherford production-optimization team collaborated with the operator to assess the production strategy and data needs across 4,000+ wells. The teams agreed to a phased rollout of the ForeSite platform starting with an 80+ well pilot and established KPIs to govern enterprise-wide adoption.
- ForeSite was installed on the 80+ wells, including natural flow, reciprocating rod lift, gas lift, plunger lift, and ESPs. The system seamlessly integrated into all data-management and planning systems, and enabled the operator to manage the pilot wells by exception. This approach identified uplift opportunities, including recommendations to increase uptime and production in underperforming wells.
- The ForeSite pilot results exceeded all KPIs. The program was then expanded to include nearly 1,000 wells in a Phase-1 rollout, which will ultimately be adopted enterprise-wide over the next 2 years.

Value to Customer

- The ForeSite platform enabled production optimization across all forms of lift while enhancing personnel efficiency and increasing equipment uptime. Following the complete rollout, the operator expects annualized savings of at least \$17.7 million per year. These savings include \$5.8 million in personnel efficiency, \$6.5 million in increased equipment run-life, and an additional \$5.4 million in revenue garnered from wells that transition more quickly from natural flow to artificial lift.
- ForeSite delivered the ability to monitor performance and recognize improvement opportunities across all reservoirs, wells, surface equipment, and pipelines by integrating existing data systems with real-time data, physics-based modeling engines, and command-and-control capabilities into a single production-optimization platform.
- The success of the pilot has motivated the operator to institute enterprise-wide rollout of the ForeSite platform.



A West Texas operator successfully implemented ForeSite to drive an enterprise-wide, production-optimization program across all forms of artificial lift. The platform will help the operator to increase operational efficiency, boost artificial-lift uptime, and increase production.

LOCATION

Permian Basin, USA

RESERVOIR

Unconventional tight oil

TOTAL WELLS

80+ scaling to 4,000+

ARTIFICIAL LIFT TYPES

- Natural flow
- Reciprocating rod lift
- Gas lift
- ESP lift
- Plunger lift

PRODUCTS/SERVICES

- ForeSite platform
- ForeSite services
- Production engineering consulting

