



# ForeSite<sup>®</sup> SENSE



## DETECT SURFACE-EQUIPMENT FAILURES

Anticipate the future. Servicing critical rod-lift components by calendar date alone opens the door to either unnecessary expenses or missed catastrophic failures that can damage the pumping unit, cause environmental spills, interrupt production, or worse.

As the first and only sensor system of its kind, our ForeSite Sense brings real-time, condition-based monitoring to your surface pumping units. The patented sensor monitors the condition of the wrist-pin bearings, measures wear, and alerts you to failures before they happen.

As a result, you can plan and execute corrective maintenance in the regular course of field activities with minimal downtime and expense.

Installed over the wrist-pin cap of your surface-pumping unit, ForeSite Sense detects and measures wear on the individual wrist-pin bearings and transmits the data to a central data collector. The intelligent sensor periodically performs a series of vibrational readings and produces a fast-Fourier transform (FFT) analysis.

**WORLD FIRST:  
DETECT WRIST-PIN  
FAILURES BEFORE  
THEY HAPPEN**

**REDUCES  
DOWNTIME AND  
LOST PRODUCTION  
BY 8 DAYS PER FAILURE**

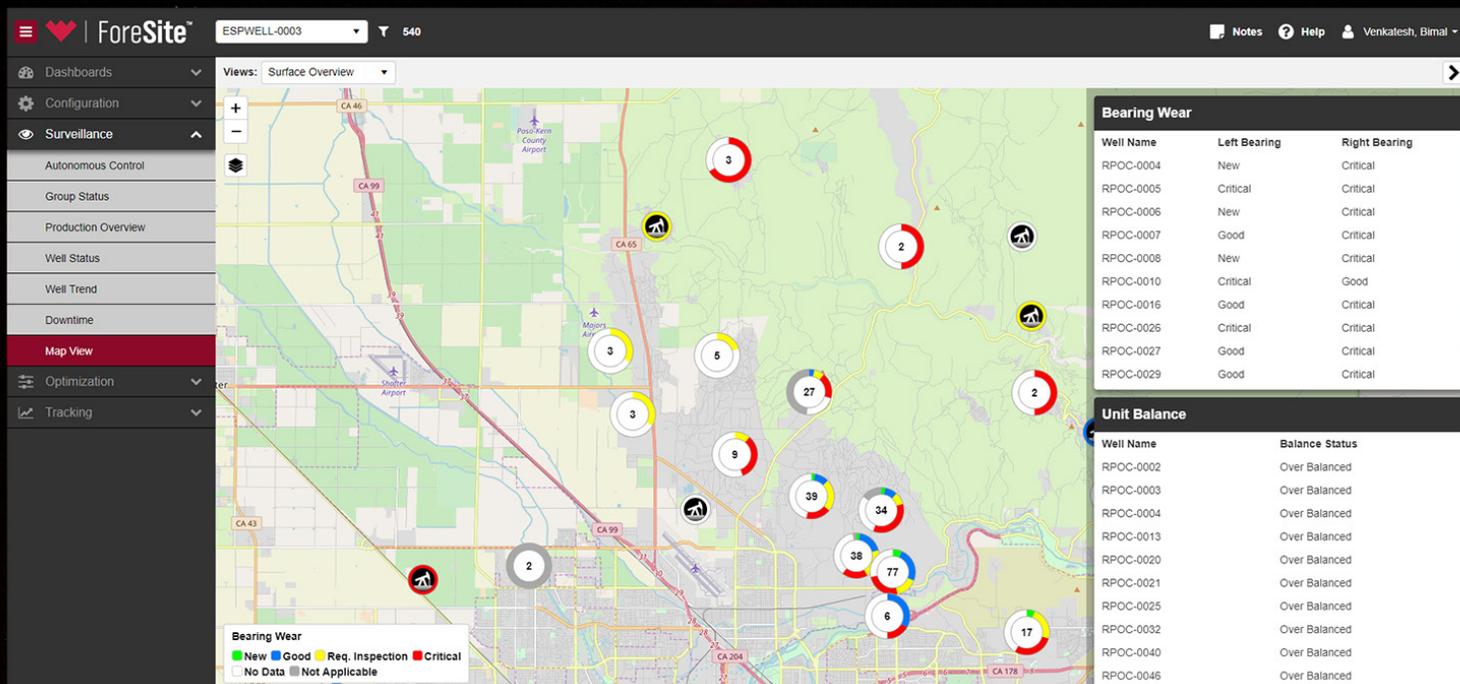
### Enhance safety and service efficiency with intelligent systems

**ALERTS**  
you to critical wear issues in advance of unexpected problems or catastrophic failures

**MONITORS**  
individual wrist-pin bearings with intelligent sensors that perform periodic vibrational readings with comparative algorithms based on preset ranges

**PROVIDES**  
autonomous well management when combined with the ForeSite suite of technologies

# MAXIMIZE PUMPING-UNIT UPTIME WITH PREDICTIVE WEAR ANALYSIS



## ALERTS YOU TO CRITICAL WEAR ISSUES

Deteriorating rod-pump components put your unit and your people at risk. When ForeSite® Sense perceives changes in the wrist-pin bearings, it alerts the crew through the SCADA system or ForeSite platform. Our crews can then inspect and repair the worn wrist-pin bearings.

**Provides proactive recommendations** for service on the pumping unit

**Maximizes efficiency of personnel, safety, and production** by eliminating catastrophic failures

**Integrates with existing rod pumping units** through a simple, bolt-on retrofit

## AUTOMATES WELL MANAGEMENT WITH PRODUCTION 4.0 CAPABILITIES

Our intelligent production systems—comprising ForeSite Sense, ForeSite Edge, the ForeSite platform, and CygNet® IoT platform—create an autonomous production optimization ecosystem that combines real-time data, physics-based models, and machine-learning techniques. Using next-generation operational workflows, our systems proactively identify production opportunities asset wide, and reduce downtime by predicting failures before they occur.

**Increase production** through intelligent, asset-wide production optimization

**Drives systemic efficiencies** by connecting and integrating oilfield equipment

**Links current and historical data** to enable autonomous decision-making at a remote site



Foresite Sense installs over the wrist-pin cap of surface-pumping units of all major brands.