

Increase uptime and improve production on plunger lift wells with **Ambyint InfinityPL™**

CHALLENGE

While plunger lift systems are mechanically simple, they produce massive amounts of data. This requires hours of daily analysis to mine for insights and draw conclusions. Many times lost in the data are a variety of production-impacting anomalies that are hard to detect or worsen gradually over time. Finally, engineers still rely on the plunger lift physics developed in the 1960's. It no longer provides an accurate model for modern horizontal wells causing wells to remain under optimized despite engineering best efforts.

With more wells than people to manage them and out of date models; operations personnel focus on a subset of wells each day resulting in issues falling through the cracks. Wells consequently load up due to instability and uplift opportunities go unrealized. Unsurprisingly, 85% of all plungers wells are under optimized.

BENEFITS

- ▶ Increase production volumes up to 7%
- ▶ Analyze hundreds of plunger wells in minutes
- ▶ Identify production-impacting anomalies instantly
- ▶ Utilize advanced physics models for better open/close trigger selection
- ▶ Automatically optimize production via setpoint changes

SOLUTION

Ambyint InfinityPL™ is an easy-to-use, cloud-based software that provides operations and engineering teams the ability to optimize all of their plunger wells. It combines the latest advancement in wellbore physics modeling with anomaly detection and numerical optimization. InfinityPL analyzes every cycle, interval, and production stream every day looking for production risks and uplift opportunities.

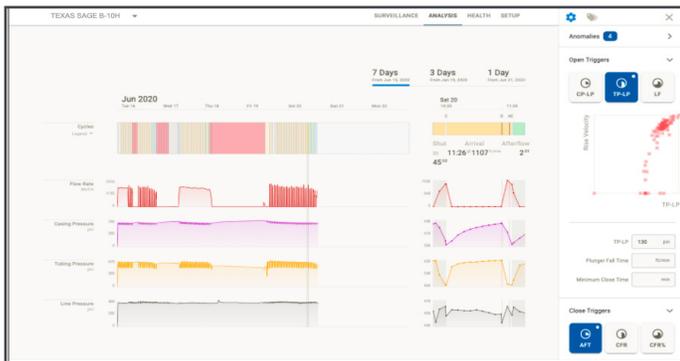
Utilizing an exploration and production (E&P) company's existing supervisory control and data acquisition (SCADA) infrastructure as the operational data source, InfinityPL surfaces insights in a customizable, intuitive dashboard. It quickly and at an early stage identifies issues on high-producing plunger wells for immediate triage and remediation. For deep technical dives, the software's novel cycle keyboard moves users through cycle data faster than other market solutions.

InfinityPL allows teams to save time, uncover issues faster, get wells back on plan, and find additional production. Ultimately, E&P companies see production levels increase as high as 7% scaling under a lower cost structure improving bottom-line performance across an entire field of assets.

ASSET OPTIMIZATION

A modern physics engine provides a more accurate model of the wellbore. These computed cycles by trigger type surface in the action panel of a novel optimization page.

- ▶ More wells analyzed in less time
- ▶ Deep insights for better decision making
- ▶ Easily spot optimization opportunities with the cycles keyboard and spotlight view



SETPOINT MANAGEMENT

Physics-based artificial intelligence and proprietary optimization algorithms provide setpoint recommendations determining which open & close triggers to enable and what setpoints maximize production.

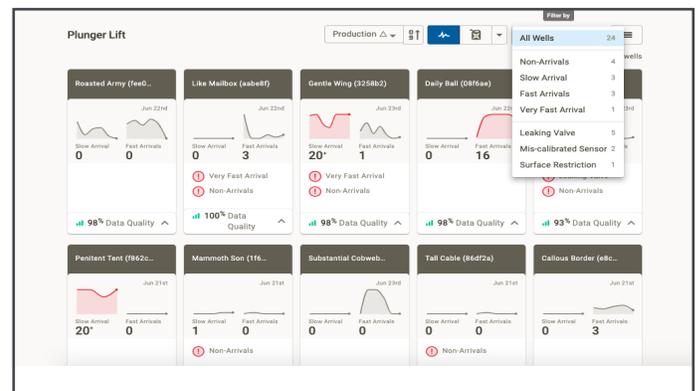
- ▶ Quantitative answer to trigger selection for increased well stability
- ▶ Dynamic setpoint recommendations to improve production uplift
- ▶ Single screen solution to view action and impact



PREDICTIVE MAINTENANCE

Analysis across every cycle identifies anomalies, such as data quality, arrival, motor valve, and sensor issues, as they occur. Intuitive dashboard spotlights anomalies for proactive remediation prior to becoming bigger issues.

- ▶ Automatic and early detection of production and cycle issues
- ▶ Issues in a clean dashboard enabling users to spend less time hunting and more time optimizing wells.
- ▶ Customizable via tags so users can view well groups in any way they desire



SYSTEM INTEROPERABILITY

Data management, open API, and 3rd-party system adapter library provides secure and robust read and write capabilities with existing SCADA and PLC/RTUs.

- ▶ Compatible with all major SCADA platforms, such as Weatherford Cygnet and Inductive Automation Ignition
- ▶ Mapped for all major controllers, such as Emerson ROC and ABB Totalflow
- ▶ Secure by design across data transport and cloud storage
- ▶ Integratable into cloud-based data lake for operating or reporting use

About Ambyint

Ambyint, a market leader in production optimization for the oil and gas industry, delivers step-change improvements to E&P production outcomes and margins. Ambyint combines advanced physics and subject matter expertise with artificial intelligence to automate operations and production optimization workflows across all well types and artificial lift systems. For more information, visit www.ambyint.com