Maximize Gas Production, Minimize Equipment Damage and Downtime, Next to Zero Emissions, Reduce Labour Costs

Embed Intelligence Into Gas Wells!

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Skip the trial and error. Our self-optimizing plunger lift systems deliver immediate value for oil and gas companies by generating upto 20% additional revenues with increased production without additional hardware. Lower your SCOPE 1 emissions by eliminating venting cycles at gas wells, saving tons of greenhouse emissions. (**Patent Pending**)

Our Monitoring Platform: Standalone, in the Cloud, or Embedded within Existing Metering and Monitoring Hardware!

Leveraging IoT and Cutting Edge AI Frameworks for Smarter, Cleaner, and Efficient Gas Wells

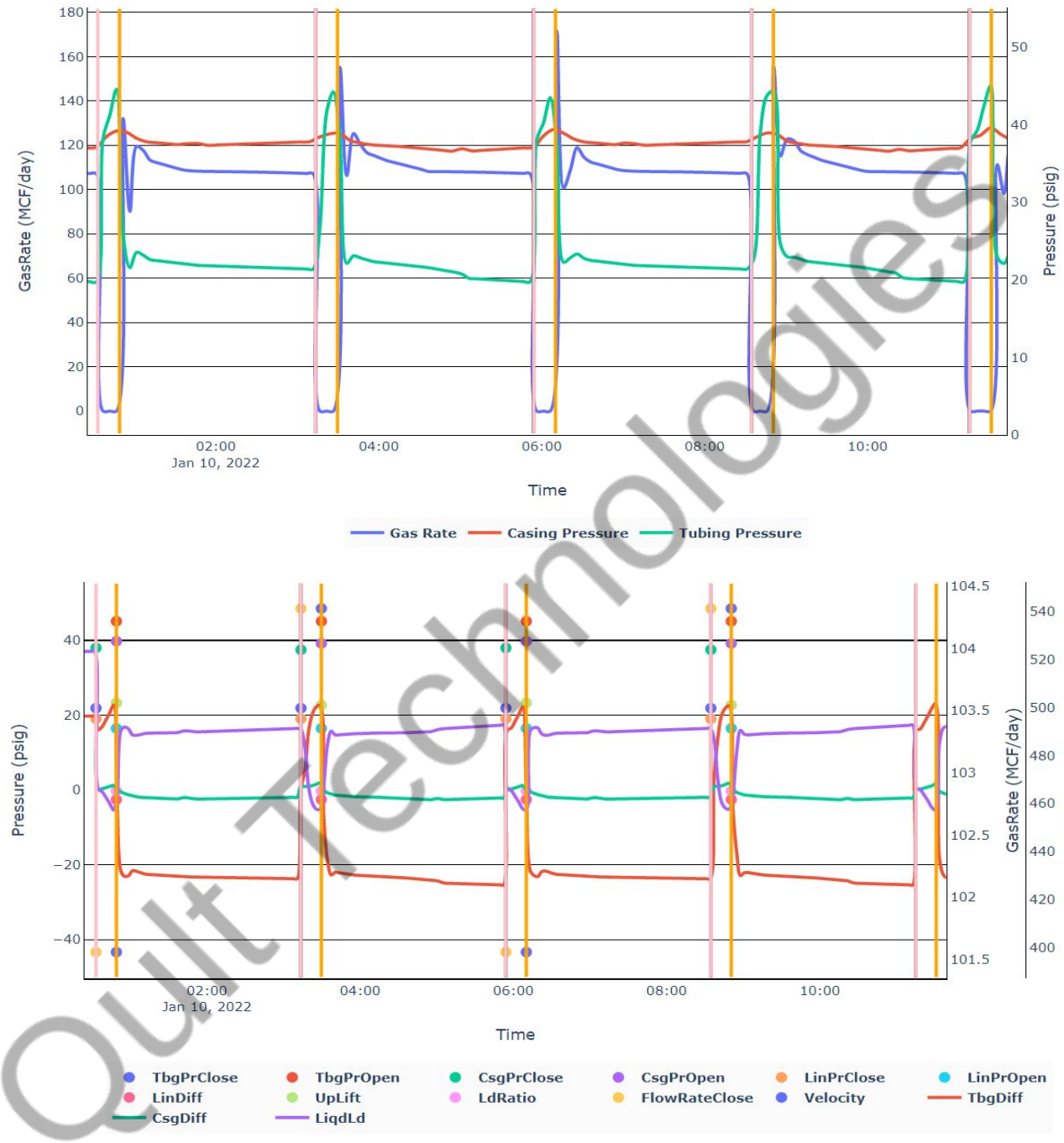
20% **Increase in annual gas production resulting from optimized cycle flow rates!**

88% **Reduction in cost due to plunger breakages and resulting downtimes.**

98% **Reduction in Scope 1 emissions during Gas-flow cycles. (Annually ~300MCF/Well)**

Live Monitoring of Gas Well Data along with Comprehensive Stats on Each Well on Your Finger Tips

Snapshots of Our Live Data Monitoring and Visualization Platform



- **Live Monitoring** of Raw Pressure Features of the Gas Wells
- **Physical Modeling** of the Gas Well to Derive **New Revealing Features**
- **Neural Network Based Approach** to Self Learning from Historical and Real Time Data to **Optimize the Gas-Flow Cycles**
- Comprehensive Libraries and Plug-and Play Algorithms **Trained on Thousands of Actual Gas Well Assets** to Deliver **Instant Optimal Well Management**

Well Cycle Optimization: Self Learning Shut-in and After-Flow Triggers

Self Learning Intelligent Well Cycle Control

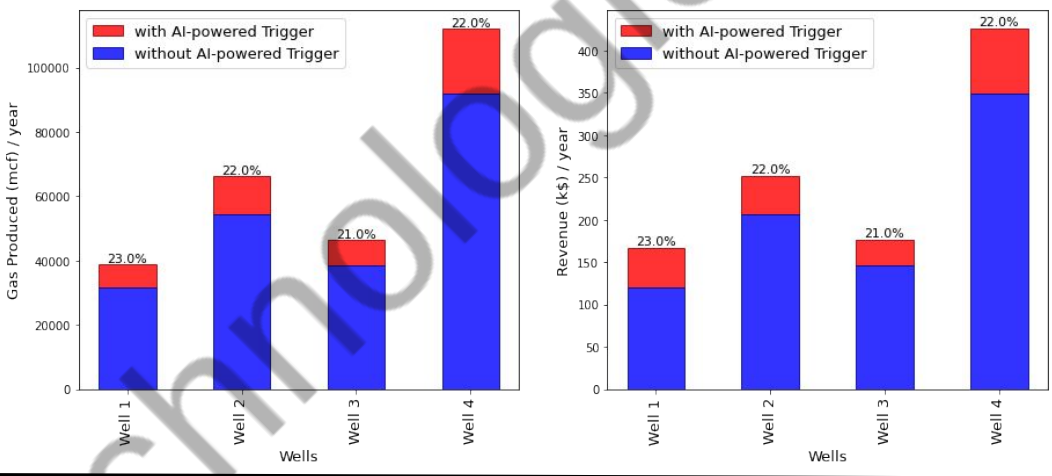
- **Optimal Well Cycles** => **Shut-in** Phase + **After-Flow** Phase
- **Comprehensive Pre-Trained Libraries** and **Algorithms**
- **Optimal Triggers** to Determine the Shut-in and After Flow Durations
- **Gas Flow-rate Forecasting** to accurately Determine the Effect of Liquid Loading on Flow Rate
- **Increased Gas Production** with Minimal Effect on Well Life

Field Results

Enhanced Gas Production

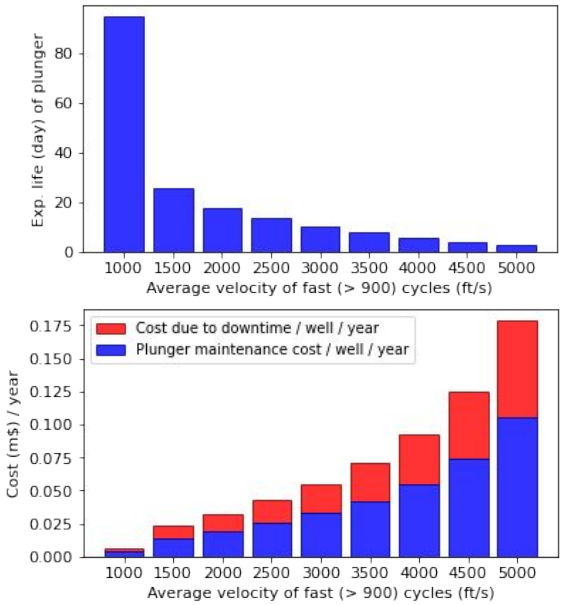
20% Increment to Existing Gas Production Volumes Achieved in field trials

$40-$80 Million Expected in **Increased Revenues Per Annum** for 4000 wells due to Enhanced Gas Production and repurposing of Scope 1 Emissions



Field Stats on Plunger Damage and Maintenance Cost + Downtime Losses with Increasing Plunger Operational Velocities

- Plunger Remaining Useful **Life Exponentially Decays with Increasing Plunger Velocities. (**Top Plot**)**
- **Lower Velocities Result in Plunger Non-Arrivals, Reducing Well Life and Emissions due to Venting!**
- **Rapidly Rising Maintenance** and **Downtime Costs**! (Bottom Plot)



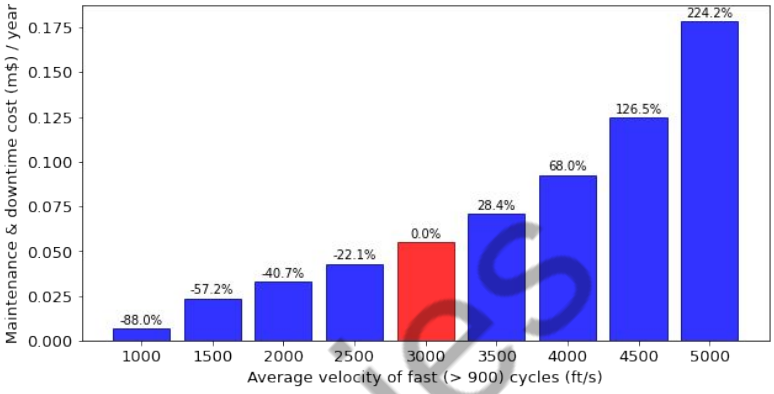
Critical to Control Plunger Velocities During Shut-in Phase to **Keep Maintenance, Downtime and Emissions in Check!**

Well Cycle Optimization: Self Learning Shut-in and After-Flow Triggers

Reduced Downtime and Maintenance (Field Results)

88% Reduction in Downtime and Maintenance Costs through **Optimal Shut-in and After-flow Triggers Delivered by Our Platform**!

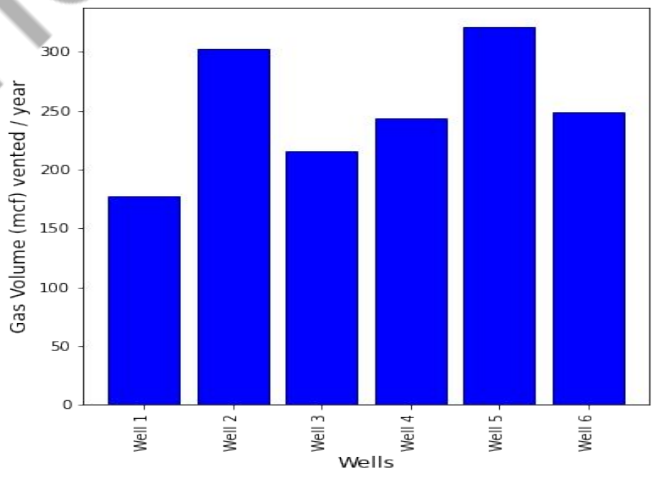
High Velocities → **Above 1200 ft/min**
Good Velocities → **Around 1000 ft/min**
Low Velocities → **Below 500 ft/min**



- Plot Shows Percentage Increase (+ve) and Decrease (-ve) in Cost w.r.t to the Base Downtime and Maintenance Cost at the Velocity of 3000 ft/min. **Stats Collected From the Field Data.**
- **Operating the Plunger at the Optimal Velocities using Our Trigger System of Around 1000 ft/min Results in a Reduction of Costs by 88%.**

Optimal Triggers → No Venting in Flow Cycles → Zero Emissions

- **Approximately 250-300 MCF Methane Leaked to Atmosphere Per Well Annually** Due to Venting Resulting From Plunger Non-Arrivals
- **Methane 80% More Potent than Carbon Dioxide in Climate Warming!**
- **US Government to Enforce Stringent and Frequent Natural Gas Leakage Monitoring**
- **Target: Curb Methane Leakage by 30%**
- **Eliminate non-Arrivals** due to Lower Plunger Velocities using our Trigger system
- **98%** Reduction in Methane Emissions
- **$4 Million** Worth of Natural Gas saved Annually from 4000 Gas Wells from Leaking into the Atmosphere!
- **Earn Carbon Credits!**

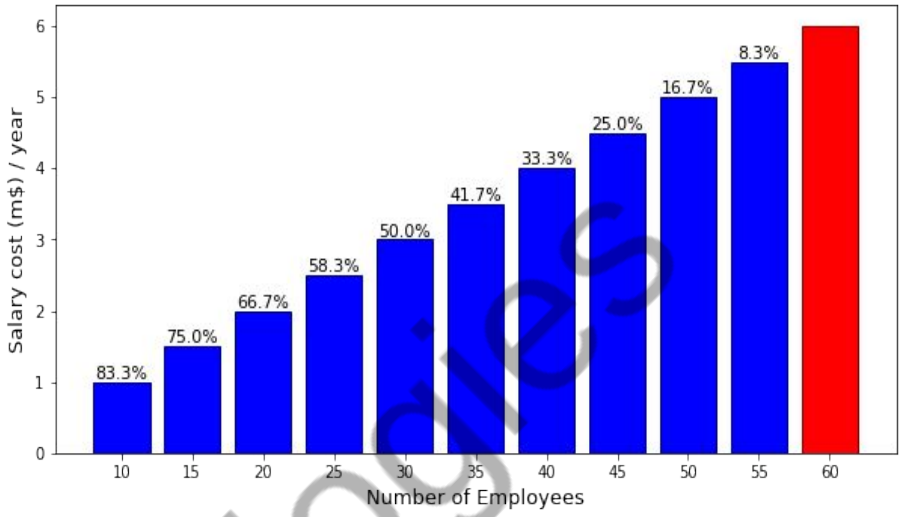


Plot Shows Gas Volume Vented to the Atmosphere From Four of Actual Gas Well Assets as an Example. Around 250 MCF/Annum/Well Released! (Actual Field Stats!)

Well Cycle Optimization: Self Learning Shut-in and After-Flow Triggers

Remote Asset Management & Reduced Labour Cost

- **Completely Automate the Cycle-to-Cycle Operations of the Well through our AI-based Trigger System**
- Significantly Reduce the Manual Oversight and On-Site Personnel to Monitor and Operate the Wells
- **Field Stats (See plot->)** Reduced the Work Force required to Manually Operate and Monitor 4000 Gas Wells Assets From 60 to 20 Personnel.
- **66.7% Reduction in Labour Costs**



Use Cases

- **ASSET PERFORMANCE OPTIMIZATION:** Gas Flow Rate Optimization using Self-Learning Scheduler
- **RISK AND COST OPTIMIZATION:** Reduce Equipment Damage and Maintenance Downtime.
- **EMISSIONS REDUCTION:** Reduce the Number of SCOPE 1 Emissions and Venting Cycles.

Current Asset Type Coverage

Oil/Gas Wells **Pneumatic Controllers**

If an asset type that is critical to your operation is not listed above, Qult Technologies will collaborate with you to deploy asset-specific analytics in record time. The data science engines and Qult Technologies other content (such as the Asset Strategy Library - an exhaustive and comprehensive database of industrial content including equipment types, failure mechanisms, and maintenance tasks), expertise, and experience at the core of Qult Technologies enable quick configuration to address new asset types and use cases.

Integrations: Data Integration Made Simple!

On cloud and on premises options available. Platform functional on AWS and Azure. Plug cycle-log data into our system and obtain live automation of the wells through our cloud/ premises active intelligent software.