

Lavoro Plunger Increases Production and Lifetime of Wells While Reducing Operating Costs

Operator experienced a 6% increase in production and 3 months longer maintenance intervals

An operator in the Barnett region implemented Lavoro Plunger to increase production through optimization that was beyond the plunger manufacturer's controller capability. To their surprise they also realized longer maintenance intervals as well.

The operator's concern

In an aging field, the operator sought to increase high value production. They found less than optimal results with standard plunger controllers. In addition, they wanted a system that would readily share information enabling remote analytics and tuning.

What was recommended

Lavoro's Plunger application was used in auto mode to automatically optimize plunger performance. Plunger speeds were optimized as well to minimize wear in lubricators and springs. All related process variables and operating statuses were sent from the edge to the cloud for remote visibility to performance and results. Additionally, the process variables and calculations were shared with the operator's historian and made readily available to Power Bl in facilities engineering, enabling performance tuning.

5	EW2H-1A Plunger:After Time	≜ ₿ ₽
Controlled By Plunger	I CHANGE Current Status I SKIP	
WELL OPERATION CYCLE State Total OH 2M Os	Elapsed Time Remaining Time Он 1м 28s Он Ом 31s	
Current No Shows O	CLEAR	
PRESSURE Static (psi) 251.59	Tubing (psi) Casing (psi) 376.20 527.38	
FLOW INFORMATION DP (inH2OAt68F) 45.00	Flow Rate (MCF/day) Critical Flow Rate (MCF/day) 1,000.00 514.00	
Flow Temp (f) 80.00		
View Active Alarms	No Alarms SHUT IN WELL	¢

Visualize and optimize plunger activity in real time, from anywhere and any device..

What was achieved

Lavoro Plunger delivered a 6% increase in production through optimized plunger performance for the operator. The liquids decline curve flattened, and the decline curve for the wells also slowed. On average, their optimized wells netted an additional two plunger runs per day compared to their attempts with timer-based control.

A side benefit was a reduction in maintenance costs for the wells. On average plunger spring life was extended more than 3 months over the timer-based control on adjacent wells.