



Weatherford®

REAL RESULTS

Hi-Per™ Elastomer Increases Progressing Cavity Pump Run-Life in CBM Wells from 3 to 18+ Months

Objectives

- Reduce operating costs and downtime by increasing the short-run lifespan of a series of progressing cavity pumps (PCPs) in a 15-well pilot project in the Wind River basin (Wyoming, USA). Frequent shutdowns and high carbon dioxide levels in the coalbed methane (CBM) wells had induced explosive decompression (ED) damage, which had limited the pumps' average run time to about 3 months. Furthermore, pulling functioning pumps as a consequence of other well issues would incur catastrophic ED damage, requiring immediate pump replacement.

Results

- Weatherford installed multiple PCP systems, featuring the *Hi-Per* elastomer, to address these issues. After installation, these problematic wells operated successfully for more than 18 months.
- The *Hi-Per* elastomer's performance proved the technical-economic viability of PCP systems for this field.

Value to Client

- The *Hi-Per* elastomer's unique properties greatly extended the run life of the client's PCP systems.
- Operating costs were reduced by dramatically reducing the frequency and associated downtime of well intervention.



This comparison of ED damage between a conventional elastomer (*left*) and Weatherford's *Hi-Per* elastomer (*right*) illustrates the *Hi-Per* elastomer's unparalleled resistance to ED damage and blistering. Before its implementation on this job, pieces of elastomer were often seen in the flowline after multiple shutdowns.

Location

Wind River basin, Wyoming, USA

Well Type

Coalbed methane

Products/Services

- PCP services
- PCP systems featuring *Hi-Per* elastomer

Weatherford
Jorge Robles, Global Product Line Manager
Progressing Cavity Pumping Systems
jorge.robles@weatherford.com