

Plunger-Lift System Restores Production in Previously Abandoned Gas-Condensate Well

Objectives

- Identify a cost-effective and reliable method to restore production in natural-flowing gas-condensate wells that had been abandoned for months and have liquid loading problems.

Our Approach

- Some of the wells had previously been equipped with reciprocating rod lift (RRL) systems in an attempt to maintain production. However, the RRL systems resulted in high operating costs and capital expenses. Ultimately, the operator had shut down these wells because the meantime between failure was very short with the RRL systems.
- Weatherford proposed the evaluation of a plunger-lift system on one of the abandoned wells. As a result of that evaluation, Weatherford installed a standard plunger-lift system that provided a safe and efficient way to maximize production.

Value to Client

- The installation of the Weatherford plunger-lift system restored production in the abandoned well at the rate of 6 m³/d of condensate and 11,000 m³/d of gas.
- The client saved on operational costs because the plunger-lift system does not require a workover rig and is not powered by electricity.
- The client was able to eliminate periodic treatments for paraffin cleanup because the traveling plunger kept the well clean.
- The use of the plunger-lift system enabled the client to reduce capital costs by more than 300 percent compared with using a traditional RRL system.
- Because of the success experienced with the Weatherford plunger-lift system, the client plans to install plunger-lift systems in two more wells.



The Weatherford plunger-lift system overcame the liquid loading problems in the abandoned well and restored production.

LOCATION

Kazakhstan, Kyzylorda Region

WELL TYPE

Onshore, vertical, condensate and gas producer

NUMBER OF WELLS

1

PRODUCTS/SERVICES

Plunger-lift system

