

Industry First: Rigless Surface Jet Pump

Replaces Nitrogen Unit, Overcomes Flowline Pressure

Produces 1,200 BOPD, and Saves \$50K/Month OPEX

Objectives

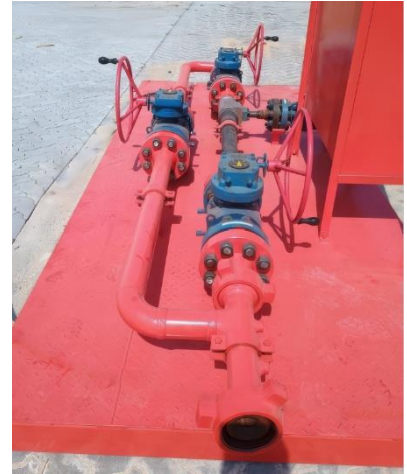
- Create a cost effective, yet sustainable solution for a network of wells that were not producing properly due to high flowline backpressures.
- Reduce carbon emissions 25% in support of operator's 2030 net-zero, carbon-footprint goals.
- Minimize use of nitrogen kickoffs required to offload well.

Our Approach

- Weatherford artificial lift specialists selected an inactive well as candidate for its rigless, surface jet pump technology to reactivate the wells—utilizing a high-power, injection fluid line from a nearby water injector well as power fluid source.
- Following multiple simulations using the Jet Evaluations and Modeling Software (JEMS™), an optimized nozzle/throat combination was selected for the operation. The surface jet pump skid leveraged this high-pressure, high-power injection fluid to produce significant drawdown forces via the Venturi principal.
- The optimized Venturi configuration provided enough pressure to overcome the flowline backpressures and unload the well.

Value to Customer

- The energy and pressure created from operator's injection lines did not require any combustible source for the surface jet pump to function. This provided a low emissions, low noise solution that perfectly aligned with the operator's long-term sustainability goals.
- By overcoming the flowline backpressures, the surface jet pump technology enabled the well to produce 1,200 BOPD, significantly boosting production.
- The rigless installation of the surface jet pump saved valuable rigtime, allowing faster deployments and reduced intervention frequency. After eliminating the need for frequent use of nitrogen kickoffs and traditional, multiphase surface pumps, the operator saved additional OPEX costs and reduced downtime valued at \$50,000 per month.



With no moving parts, the Weatherford surface jet pump delivers a cost effective, rigless production enhancement for a variety of applications including natural-well augmentation and wellhead backpressure reduction. For wells with naturally declining production rates, the surface jet pump will boost production levels without a workover unit and only minor modifications to pump components.

LOCATION

Abu Dhabi, UAE

WELL TYPE

Onshore

FLOWLINE PRESSURE

650 psi (4.48 MPa)

FLOWLINE TEMPERATURE

120°F (48.8°C)

PRODUCTS/SERVICES

- Artificial Lift Solutions
- Rigless Surface Jet Pump
- Jet Evaluations and Modeling Software (JEMS)

