WHAT IF YOU COULD REDUCE UPFRONT CAPEX BY GIVING THE RESERVOIR A HELPING HAND?

The longer you can sustain high initial flow rates by taking advantage of natural reservoir energy, the better. And Weatherford surface jet pumps help you do exactly that. When reservoir pressure is still strong enough to contribute to production—but it needs a little help to overcome backpressure, enhance the flow rate, and meet your production goals—Weatherford surface jet pumps deliver. Better still, surface jet pumps connect directly to the wellhead and don’t require a workover rig, thus reducing the costly interventions that’s required to install downhole lift components.

With no moving parts, the Weatherford surface jet pump delivers cost-effective, rigless production enhancement for a variety of applications:

- Overcoming high flowline pressure to enhance natural well pressure and restore production
- Reducing CAPEX by extending early-stage production
- Replacing traditional multiphase surface pumps to reduce backpressure at the wellhead
- Wellbore cleanup after completion
- Deliquifying gas wells
- Producing heavy, viscous, or corrosive liquids
- Delaying the need for downhole lift components
- Delaying OPEX with rigless installation and servicing
- Producing C02 and natural-gas wells

Find out what Weatherford has to offer. To learn more about how Weatherford surface jet pumps can enhance natural well pressure and restore production in wells with high flowline backpressure, contact your local Weatherford representative. For more information about our full breadth and depth of offer, visit weatherford.com.
How surface jet pumps work

To reduce early production costs and improve recovery efficiency, it pays to keep your wells flowing longer and stronger with natural reservoir pressure. But when the reservoir pressure has been depleted to the point that high flowline backpressure slows or entirely stops production, it’s time to take action.

In many cases, installing a surface pump near the wellhead is an effective, minimally intrusive way to reduce backpressure at the wellhead and to restore and increase production. Traditional multiphase pumps, however, have drawbacks. On top of their high cost, they aren’t tolerant of produced gas and solids, and this can lead to premature pump damage and unreliable performance. Surface jet pumps, on the other hand, rise to the challenge—even in the most pressurized, grittiest, most challenging of wells.

**FINE-TUNED PERFORMANCE, OPTIMIZED PRODUCTION.**

Based on your production goals and the unique characteristics of your well, we will design and adjust your surface jet-pump system to effectively achieve the projected flow rate. Using detailed calculations to create a performance curve similar to the one shown below, we can determine the proper pressure differential (ΔP) needed to reduce wellhead backpressure, overcome flowline backpressure, and achieve the projected flow rate. For example, the 8,000-B/D flow rate intersects with the curve at a ΔP just under 300 psig. The ΔP is determined by subtracting the intake pressure at the wellhead from the discharge pressure at the flowline.

**REAL RESULTS**

Increased CO₂ production

Up to 800 Mcf/d of CO₂ recovered by reducing flowline pressure in Wyoming well

Restored production

Reduced flowline backpressure 45% and re-established 750 B/D in dead Louisiana wells

**TWO OPTIONS FOR LIFTING.**

Pressurized power fluid

Reservoir hydrocarbons

Comingled fluids (power fluid and reservoir hydrocarbons)

Diffuser

Mixing tube

Nozzle

Contrasted fluids (power fluid and reservoir hydrocarbons)

Reservoir fluid

Reservoir hydrocarbons

Lift smarter.”

Weatherford surface jet pumps represent only a fraction of our production solutions. With our unparalleled experience and an unmatched breadth and depth of solutions for more forms of artificial lift than any other provider, we can optimize production in any field. Our customer service centers are conveniently located in every major oil-producing area of the world to address your needs efficiently wherever you operate.