



## PULSE PUMP Dual Line

### DEWATERING YOUR GAS WELLS

#### *A revolutionary alternative:*

Due to the novel design and the principle of operation, the Thainstone Pulse Pump dewatering system requires much less energy than any beam pump, progressive cavity pump, or electrical submersible pump system.

Mature gas wells can now be optimized to produce gas at higher rates. This is achieved without the constant upset to facility compressors and separator often caused by plunger lift systems. The Pulse Pump can be set with the system's timers and controller to achieve a steady state production of gas while allowing for increased gas reserves to be recovered from a reservoir.

In addition, there is no wear on production tubing from sucker rod movement, as found in other pumping systems, as there is no sucker rod in place.

#### *Designed to be deployed through production tubing to any depth without killing the well:*

The Pulse Pump Dual Line's unique dual conduit concept allows the pump to be deployed directly into any well bore, without the requirement for any other completion equipment in the well.

The hydraulically operated pump is suspended in the well bore via two concentrically aligned conduits. Hydraulic pressure pulses applied alternatively to the inner and outer conduits operate the pump, drawing fluids from the well bore and producing them to surface via the annular space.

Length:	62"
Outside Diameter:	1.875"
Stroke:	12"
Production Rate:	5-8 BPD*
Deployment:	Concentric Conduit
Working Depth:	Up to 20,000 ft

\*Production rate is a function of strokes/min and conduit line sizes