

Public Executive Summary

A new, effective and tested dewatering pumping system based on proven hydraulically operated diaphragm pump technology has been developed and patented. Pumps have been deployed on concentric steel coil tubing for major operators in the San Juan and are planned for East Texas operating regions. In these installations, the pumping system has proven to be reliable and effective in dewatering gas wells. As favorable as these results are, these pumps are not economic for lower productivity wells due mostly to the high cost of concentric coil tubing, installation, and the cost of bringing in power.

The goal of this project is to develop and demonstrate in the field lower cost deployment and operating methods based on this pump. Cost will be reduced by 1) The use of low cost thermoplastic tubing, 2) the use of low cost spoolers in place of coil tubing rigs and 3) the use of solar, wind and other independent, non polluting power systems to power the pump.

When this project is completed, a low cost, tested, insertable pump, deployed on flexible plastic hydraulic lines with low cost spoolers will be available to the stripper well community nationwide.

Another goal of the project is to demonstrate the operation of the pump using small scale solar or wind power systems, and/or the use of a truck mounted power source to eliminate the need for power lines or internal combustion engines on site. This system is one of the few that has the option to be operated using small scale alternative energy systems.