

## Synchro-Smart<sup>™</sup> Rodless PCP Enables High Density Well Placement

Compact downhole system enables 18 closely located wells

## BENEFITS

- High density well placement
- Environmentally responsible low soil contamination
- Remote monitoring and control
- Low energy consumption

## WELL BACKGROUND AND CHALLENGES

- Planned 18 new directional wells
- Wells of varying depths and directions
- Desire for low OPEX

## RESULTS WITH SYNCHRO-SMART™ RODLESS PCP

- High density well placement as close as 6 m
- 18 close proximity directional wells
- Real-time visibility to well and pump conditions for entire fleet
- Low noise and low profile operation





Eighteen Synchro-Smart Rodless PCP systems operating in new oilfield

An operator in Dagang field, located in Northeastern China, desired a compact artificial lift solution to enable high density well placement for 18 directional wells. In October 2018, Megmeet installed the Synchro-Smart<sup>™</sup> Rodless PCP system for 18 adjacent wells.

The wells were drilled at varying depths and directions to optimize the oil production. A key decision factor in the artificial lift selection for this site was the ability to locate the wells in close proximity, as low as 6 m well to well spacing. The artificial lift surface area requirements range from 25 m<sup>2</sup> for a rod pump to the 5 m<sup>2</sup> for the Synchro-Smart Rodless PCP system. The Synchro-Smart system enabled the desired high density well placement.

Production from these wells is managed remotely utilizing the web-based Synchro-Smart monitoring and control portal. The operator has real time and historic data on the pump speed and well conditions, enabling remote programming of the pump to optimize output. The system may also be set to self-adjusting mode which optimizes the pump speed to maintain a pre-selected constant dynamic fluid level or intermittent operation for very low flow wells. Real-time reporting of well conditions has reduced well-site maintenance visits.

The downhole PCP alleviates the surface oil leakage common with rod pumping systems to meet stringent environmental agency requirements. With no above ground moving parts, the Synchro-Smart operates silently and with no odor, making it a very eco-friendly artificial lift system.

The proven success of this site led the operator to install Synchro-Smart systems at a second site with 20 high density wells.