



Rotoliptic

ANY VISCOSITY

ANY TEMPERATURE

ANY PHASE

Case Study: A Steamflood Field Demonstration Using the **R65-800** Downhole Pump

CUSTOMER CHALLENGES

This customer faced significant challenges in their steamflood field due to steam reducing the production of their artificial lift systems. Their existing reciprocating rod lift (RRL) systems in this field were experiencing difficulties when steam breakthrough occurred, including gas locking and inconsistent/reduced oil production.

The customer wanted a reliable artificial lift system that would be able to meet target production rates without negative effects of steam flashing, and eliminate the need to pause steam injection or carry out workovers.

TECHNOLOGY SOLUTION

The solution for this customer was the **Rotoliptic R65** pump. The customer aimed to test the ability of the **R65** to either delay or prevent steam breakthrough or at a minimum, maintain consistent oil production rates before and after steam breakthrough occurred. The **R65** had previously demonstrated its capability in other applications to manage multiphase flow without reductions in efficiency, including mixtures of oil, water, and steam.

The **R65** was hypothesized to delay or prevent the negative effects of steam flashing due to the slower, continuous flow of its progressing cavities that differ from the faster discontinuous flow as an RRL intakes fluid during the upstroke. The continuous flow of the **R65** with each stroke eliminates the cyclic pressure drop that encourages water to flash to steam.

FIELD RESULTS

The **R65** has been operated continuously for over 1 year and results have shown that the well has been pumped-off without interruptions or the need for interventions during this time. The **R65** has effectively prevented or handled steam breakthrough and maintained target production rates throughout varying temperatures and viscosities. The **R65** showed reliable and consistent production in the challenging steamflood environment, adapting to varying downhole conditions and maintaining a pumped-off well.

TECH REPORT

LOCATION
UNITED STATES

FLUID TYPE
67-97% WATER CUT

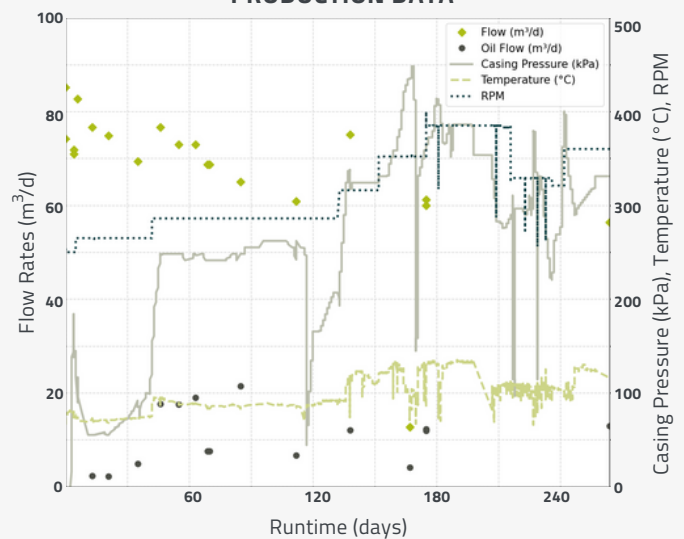
WELL TYPE
STEAM FLOOD

DOWNHOLE TEMPERATURE
65°C/140°F - 134°C/274°F

PUMP DEPTH
260M / 853FT

PRODUCT
R65-800

PRODUCTION DATA



PUMP CURVE VS. DOWNHOLE READING

