Case study: Saskatchewan, Canada

FlowSuite assisted slip stream application for producer in Canada

An oil producer in southern Saskatchewan, Canada was experiencing high line pressure due to severe emulsions. At one particular well, the emulsion was so severe that the well would only produce a few hours before going down due to high pressure. In order to control this situation, the FlowSuite™ product was initially injected down the flow line at a rate of 64 liters per day. This kept the well head pressure to about 3700 kPa.

In order to reduce the line pressure further, Baker Hughes representatives recommended adding the demulsifier down the casing using a slip stream. A four-way electronic switching valve and a needle valve was installed to slip some of the production back down the casing along with the demulsifier.

The result of adding FlowSuite down the casing using a slip stream was additional 1900 kPa pressure drop. The well head pressure is now 1800 kPa instead of 3700 kPa, and the demulsifier consumption was reduced to 46 liters per day from 64 liters per day. The lower well head pressure also increased oil production by 2.5%.
.

Challenges

- High line pressure due to severe emulsions.
- Severe emulsions causing well to shut down after a few hours of production.

Results

- Installation of a four-way electronic switching valve and needle valve to introduce demulsifier down the casing.
- Addition of FlowSuite down the casing resulted in an additional 1900 kPa pressure drop.
- Reduced demulsfier consumption to 46 liters perday from 64 liters per day.