

Expro Excellence

Expro delivers bespoke Managed Pressure Drilling solution

PowerChokes



Objectives and background

- Expro was approached by the customer to assist in drilling an additional well in West Texas
- While drilling this formation the customer was experiencing large debris in the drilling returns. This led to issues in packing off, which can result in Chokes becoming fully blocked
- The formation being drilled was experiencing pressure related issues. The customer was keen to implement Managed Pressure Drilling (MPD) techniques to help control the pressure
- Other drilled wells in the same location had been encountering pressure issues, which had led to non-productive time (NPT). The customer had not been able to reach their target depth
- From a safety perspective, not being able to control pressures can lead to well control issues, which are critical, and this is something that all rigs aim to avoid

Expro Excellence

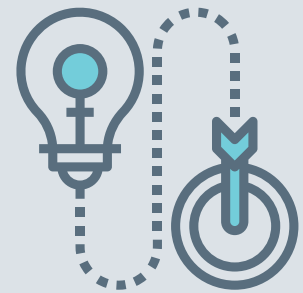
- Our team was able to offer a 4" choke with low-pressure drop and the capability of flowing 2" debris which vastly reduce the likelihood of pack off
- Expro's Automated Back Pressure (ABP) uses software that highlights pack off and can automatically engage the second choke

- We provided a Pressure Relief Valve (PRV) system that reduced the pressure spikes if pack off happened
- Our fully Managed Pressure Drilling (MPD) system operates with a crew of two or three people compared to other systems who require four to five people

Value to the client

- The customer had no pack off issues despite the size and quantity of debris which can be seen in figure 1
- Expro's bespoke, cost effective Managed Pressure Drilling solution offered the customer a premium service, which resulted in being able to drill deeper. Currently, none of our competitors can offer such a high performing pressure control as can be seen in figure 2
- Our chokes can identify both pack off and switch over, giving low frictional pressure at the surface
- The customer had zero non-productive time (NPT) in this challenging well
- Expro's MPD system requires fewer personnel to operate

Innovative solution



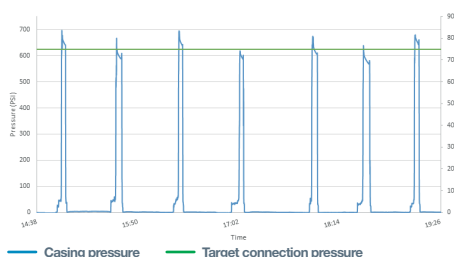
Quality standard



Figure 1: debris passing through chokes



Figure 2: trapping pressure on connections



Contact

For further information please contact:
powerchokes@exprogroup.com
 or visit
exprogroup.com/powerchokes