

PRECISION MECHANICAL APPLICATIONS

WELLBORE CLEANOUT

Client: Centrica Storage Limited
Country: UK
Field: Rough
Year: 2018
Technologies: **PowerTrac 218** • **PrecisionCollector 250**

MAKING INTERVENTION
SMARTER

PrecisionCollector removes debris restriction and collects debris from a Southern North Sea dry gas well

- Multiple debris restrictions removed
- Wellbore debris sample recovered for analysis

CHALLENGE

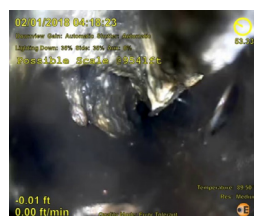
Previous attempts made to intervene in a gas storage well had been unsuccessful, with a HUD tagged higher than expected. The client wanted to diagnose the problem and identify the cause, which was suspected to be debris related, ultimately returning the well to maximum production.

SOLUTION

A camera and **PrecisionCollector** cleanout tool were mobilized for the operation, to be run in combination with a **PowerTrac** Tractor to convey the tools in the high deviation section of the well. The camera was to inspect the condition of the wellbore and indicate the nature and position of any debris found. The **PrecisionCollector** was to both remove any debris hindering well access and choking production, and to collect and recover the debris to surface for further analysis. The **PrecisionCollector** assembly comprises a rock bit to mill and dislodge the debris, as well as multiple collection chambers to retain and recover debris to surface. Debris milling and collection is done simultaneously. Depending on the volume of debris encountered, multiple runs can be carried out.

RESULTS

Following identification of a debris bridge by the downhole camera at circa 9500ft, the **PrecisionCollector** was run in hole. The debris bridge was milled successfully, with clear progress seen on surface via real-time tool measurements. As depth progress was made by the **PrecisionCollector** assembly there were indications of additional smaller debris patches being confronted and removed. The camera was redeployed in the well and captured video footage that clearly showed the debris bridge had been removed. Upon progressing deeper, a second debris bridge was encountered. The **PrecisionCollector** assembly was run again and successfully cleared this second, deeper debris bridge. Once at bottom, the **PrecisionCollector** was used to collect a debris sample from the sump of the well, retrieving a total of three litres of varying debris type. The entire operation was carried out by the Altus multi-disciplined e-line and slickline crew with the logging engineer operating both the **PowerTrac** and downhole video camera. This resulted in significant reduction in POB.



Initial camera run, showing debris in the tubing



Subsequent camera run post **PrecisionCollector** cleanout, showing bridge removed.



Debris recovered from well – wet scale and sand mix



Debris recovered from well – compact dry sand

*“This was both an efficient and effective wellbore cleanout operation carried out by the **PrecisionCollector**, successfully milling and removing debris bridges as well as retrieving debris for subsequent analysis.”*

Dave Farquhar, Well Operations Engineer,
Centrica Storage Limited