

Case study: Middle East

## EQUALIZER SELECT AICD enabled production across 8600-ft open hole, saved \$1.3 million USD

A customer in the Middle East encountered tight spots in a 16,700-ft (5090-m) total depth (TD) horizontal well while pulling the drilling bottomhole assembly (BHA) out of the hole. To produce the well without a sand problem, an inflow control device (ICD) with sand screen completion was needed across the 8,650 ft (2636 m) sand formation. Such an operation, however, carried substantial risk considering the openhole length. With conventional technology, the customer would have to run the ICD lower completion with the inner string through the open hole, which would require more than 24 hours extra time to deploy, increasing the risk of pipe sticking and borehole instability.

Baker Hughes solved all challenges with a unique solution: deploy a 4 ½-in. EQUALIZER™ SELECT autonomous inflow/injection control device (AICD) with an EXCLUDER™ screen and an MTV™ hydraulically activated device feature, MPas™ inflatable openhole packers, a REFlex™ field-installable reactive element packer, a wellbore isolation valve, and a motorized reamer shoe. The entire BHA would be deployed with a control set Flex-Lock™ hydraulic-set liner hanger with ZXP™ liner top packer.

The EQUALIZER SELECT AICD features a unique tortuous path geometry that equalizes flow across the lateral to enhance production and improve recovery—with no interaction from the surface. The control set hanger eliminates the risk of prematurely setting the liner hanger while the MTV device temporarily blocks communication through the string, allowing full circulation through the shoe and removing the cost and risk associated with running an inner string in the lower completion.

The Baker Hughes personnel flawlessly installed a total of 9,100 ft (2773 m) of the EQUALIZER SELECT AICD with the MTV device in the open hole, the longest ICD in a lower completion in the region. The MTV feature reduced the risk of differential sticking and enabled the customer to complete the long openhole completion successfully.

The customer saved more than 42 hours of rig time, and the ability to produce the well with an estimated \$55 million USD revenue for the next two years.

## Challenges

- Install sand screen across 8,650 ft of open hole in an extended reach well
- · Avoid stuck pipe

## **Results**

- Deployed EQUALIZER SELECT AICD with an EXCLUDER screen across the entire openhole section
- Saved 2 days rig time and \$1.3 million USD
- Enabled customer to produce the well with a sand control screen and ICD
- Incurred zero nonproduction time
- Experienced no health, safety and environmental issues