CASE HISTORY

MagTraC MWD RANGING™ - IDENTIFIES OUT OF POSITION WELLBORE

APPLICATION
Collision Avoidance

TECHNOLOGY
MagTraC MWD Ranging™

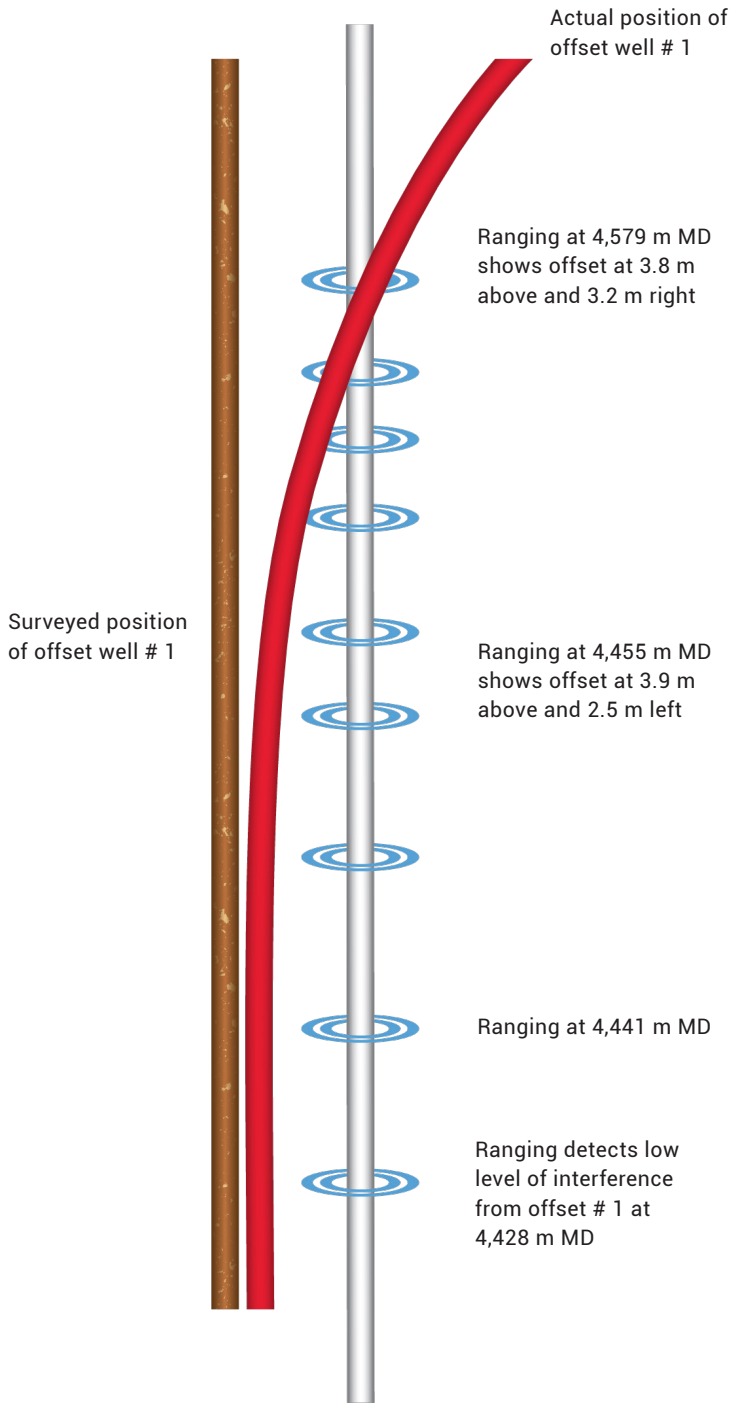
LOCATION
Norway

CUSTOMER CHALLENGE
Due to anti-collision issues with offset wellbores, the client selected MagTraC to monitor wellbore positioning. Two of the wellbores presented a high collision risk and were closely monitored.

SCIENTIFIC SOLUTION
After drilling out the 7" liner shoe, check shots were taken at 4,260 m MD to correct for drill string interference and sensor alignment. As ranging continued, interference was detected at multiple depths. At 4,455 m MD, the decision was made to complete a full range at the end of the stand. The data showed that offset well #1 was 3.9 m above and 2.5 m left of the wellbore at a MD of 4,440 m.

This meant the actual position of the offset well was 18 m further south and 3 m shallower than the surveyed position. At 4,579 m MD, the offset well #1 was shown to be 3.8 m above and 3.2 m right of the wellbore. This showed it had crossed over and above the wellbore from left to right with ~ 3.5 m TVD separation. At this point, the offset well #1 had crossed over and diverged from the wellbore.

CUSTOMER VALUE
MagTraC MWD Ranging™ confirmed the location of the offset wellbore #1 and identified that it was actually more than 18 m away from the surveyed position, which significantly altered the collision parameters. Ranging continued until the wellbore divergence was confirmed and there was no further collision risk. All data was analyzed using the existing MWD, and didn't require additional SDI personnel on location - ensuring there were no disruptions to the client's operations.



Updated August 2014