

CASE HISTORY

MagTraC MWD RANGING™ - COMPLETES MULTIPLE INTERCEPTS TO P&A WELL

APPLICATION

Plug & Abandon

TECHNOLOGY

MagTraC MWD Ranging™
and gyroMWD

LOCATION

West Texas

CUSTOMER CHALLENGE

The client was required to set casing whipstock and sidetrack around a fish, paralleling the target wellbore to intercept at 4,300 ft and 6,300 ft in order to P&A the well.

SCIENTIFIC SOLUTION

Scientific Drilling's MagTraC MWD Ranging™ and gyroMWD were used to monitor wellbore positioning out of the window and maintain required well separation of ~7 ft at 4,000 ft. SDI's Keeper gyro was then used to orient the whipstock and re-survey the top section.

The wellbore was steered towards the target well and ranging continued to monitor separation within 1 ft of the target. This showed close proximity at 4,258 ft and 4,325 ft, confirming contact at the first target depth. The well was then steered away to enable positioning for the second intercept. Ranging continued to monitor the well position to maintain a 6 ft offset. At 6,500 ft, the target was within 1 ft of the wellbore and evidence of contact was seen down to the final TD of 6,730 ft. This confirmed contact at the second target depth.

CUSTOMER VALUE

The customer successfully P&A'd the well, setting plugs at the two required depths, allowing them to satisfy regulatory abandonment requirements. The ranging service was performed from the SDI Data Center, eliminating the need for additional personnel on location, delivering significant cost savings to the client.

Set casing whipstock and sidetrack out of window. Ranging to maintain a separation of 7 ft

Wellbore has 5½ in casing from 2,450 to 11,126 ft

At 4,000 ft, steer towards target wellbore to get within 1 ft

Continue ranging to 1st intercept depth at 4,258 ft. Contact confirmed

Wellbore steered away to allow separation down to 2nd intercept depth. Ranging used to keep 6 ft offset then steered towards target to be within 1 ft

Continue ranging to 2nd intercept depth at 6,730 ft. Contact confirmed

