

CASE HISTORY

MagTraC MWD RANGING™ INTERCEPTS AND KILLS BLOWOUT WELL

APPLICATION

Wellbore Intercept/Relief Well

TECHNOLOGY

MagTraC MWD Ranging™
and EM gyroMWD

LOCATION

Middle East

CUSTOMER CHALLENGE

An inaccessible location, due to a blowout, required a relief well to be drilled. The relief well was planned based on existing gyro survey results of the well. MWD Ranging™ was required to detect target and adjust the gyro survey location (3 ft North and 3 ft East). MWD Ranging™ would continue until desired intercept depth below the packer was reached and then intercept the target with angle suitable for milling.

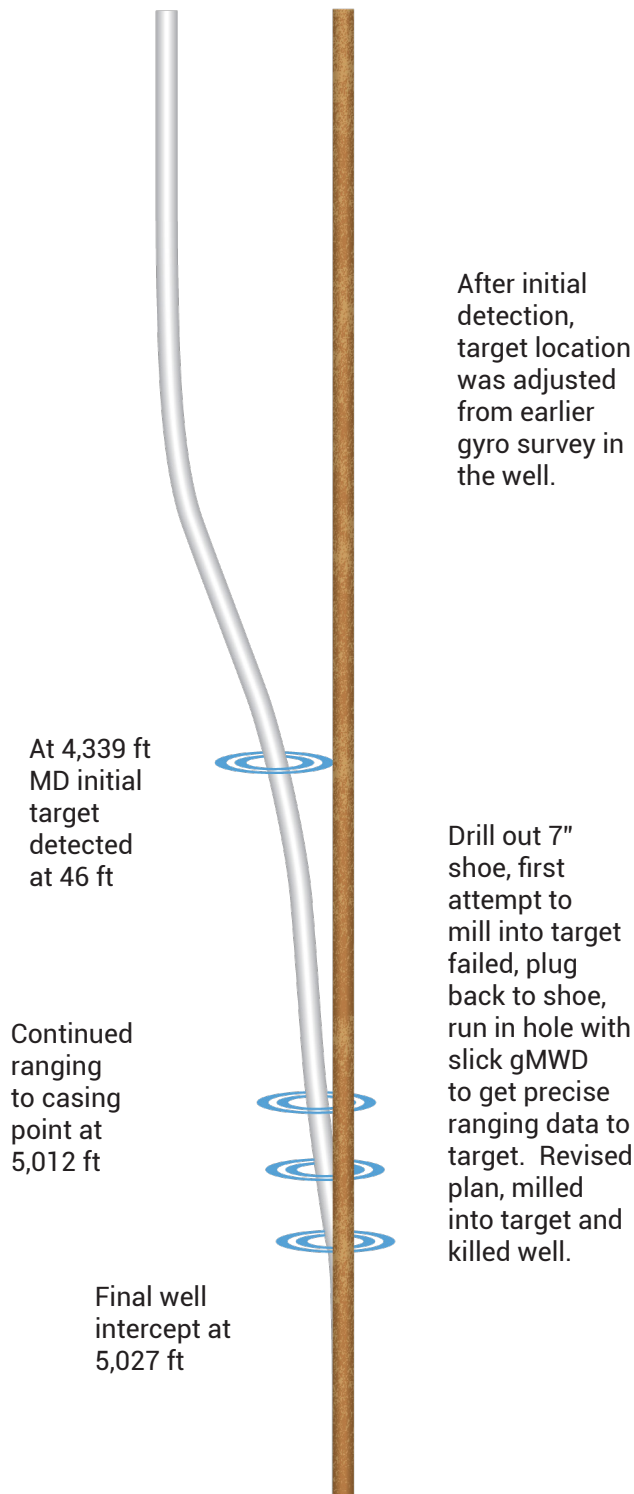
SCIENTIFIC SOLUTION

Scientific Drilling's MWD Ranging™ was selected as the preferred ranging technology. MagTraC showed positive detection of the target 46 ft away at 4,339 ft MD. Positive detection of the target allowed the customer to set 9-5/8" with confidence at a depth allowing the shallowest possible intercept.

The 8-1/2" section was drilled out, adjusting the target location and ranging continued to intercept depth and 7" casing was set. Before intercept, a SDI gyroMWD slick run was made to get precise, as close to TD, ranging data. A revised plan, based on the precise ranging data, was drawn up. The next run successfully milled into the target and the well was killed at approximately 5,050 ft.

CUSTOMER VALUE

MagTraC service, coupled with gyroMWD and continuous BTotal™ resulted in precise target monitoring. The ranging plan for the revised intercept plan resulted in milling into the target and a successful well kill.



After initial detection, target location was adjusted from earlier gyro survey in the well.

At 4,339 ft MD initial target detected at 46 ft

Continued ranging to casing point at 5,012 ft

Final well intercept at 5,027 ft

Drill out 7" shoe, first attempt to mill into target failed, plug back to shoe, run in hole with slick gMWD to get precise ranging data to target. Revised plan, milled into target and killed well.