CASE HISTORY

MagTraC MWD RANGING™ RECOVERS LOST PRODUCTION

APPLICATION

Close Proximity Drilling/Frac Recovery

TECHNOLOGY

MagTraC MWD Ranging™
and EM gyroMWD

LOCATION

California

CUSTOMER CHALLENGE

Numerous producing wells were taken offline due to casing damage in an area where subsurface formation shifts cause the casings to collapse or part. Some of the target wells had no surveys, making the initial detection challenging. Accurate positioning within 10 ft of the new well was required to gain access to original frac pattern. Stimulation cost exceeds the cost to drill and case a well but proximity must be within 10 ft of the original wellbore to capture the production.

SCIENTIFIC SOLUTION

Drill replacement wells that will use stimulation from the damaged wells. Using SDI's MagTraC MWD Ranging™, the new wells were spudded approximately 40 ft from the surface location of the target (damaged) wells.

In this instance, the target well was detected at 890 ft MD at a distance of 14.4 ft. Ranging continued over 1,000 ft to maintain a 6–7 ft proximity to the target using EM MWD and Continuous Btotal ™.

CUSTOMER VALUE

The stimulation cost on this type of well is a significant proportion of the total well cost. By using MagTraC to position the wells to gain access to the original frac pattern resulted in a major cost saving for the customer. This particular well was completed in 80 hours and production was restored.

Over the total project, an average drilling time of 4.5 days per well and 12% under budget per well were achieved for the 10 wells.