

## CASE HISTORY

# MagTraC MWD RANGING™ SERVICE SUCCESSFULLY LOCATES TARGET WELL FOR PLUG & ABANDON

### APPLICATION

Plug and Abandon  
Wellbore Intercept

### TECHNOLOGY

MagTraC MWD Ranging™  
gyroMWD

### LOCATION

Permian Basin  
Odessa, TX

### CUSTOMER CHALLENGE

During remedial work 550 ft of surface casing was pulled from the well. Attempts to access the remaining casing resulted in the wellbore being sidetracked. The customer was required to plug and abandon the well as per the TRRC to protect ground water resources, but could no longer regain access to the original wellbore from surface. The objective was to drill the sidetrack back towards the original cased wellbore and twin it down to 1360 ft, using MagTraC MWD ranging to confirm the position of the sidetrack relative to the original wellbore. At 1360 ft perforating and cementing operations would then be used to plug the original wellbore. The work was to be performed using a low cost service rig.

### SCIENTIFIC SOLUTION

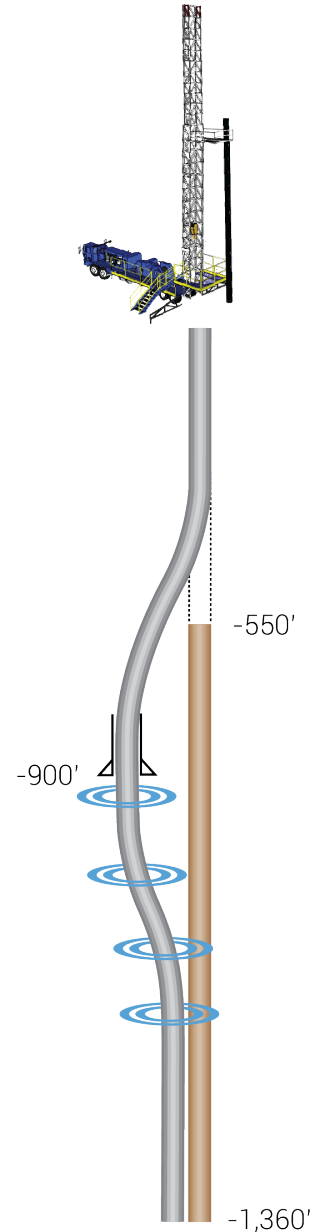
Scientific Drilling's MagTraC MWD Ranging™ and gyroMWD services were used to drill the sidetrack well from a depth of 900 ft to TD at 1360 ft, maintaining less than 3 ft separation from the original cased wellbore at all times.

The gyroMWD allowed accurate survey measurements of the sidetrack wellbore to be made in the presence of magnetic interference from the casing, and provided steering control for the directional drilling process. MagTraC MWD ranging determined the distance and direction to the offset wellbore, enabling the directional driller to steer the sidetrack back towards the original wellbore and maintain close proximity until TD.

MagTraC ranging at TD determined the orientation to the original wellbore, which allowed the perforating guns to be set correctly.

### CUSTOMER VALUE

The wellbore was successfully plugged and abandoned using the service rig, and all regulatory requirements were satisfied. Scientific Drilling's solution enabled the abandonment objectives to be met without the need to spud an offset well and drill a dedicated intercept well using costly active ranging techniques.



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