CASE HISTORY

MagTraC MWD RANGING™- HELPS CLIENT P&A DAMAGED WELLBORE

APPLICATION

Wellbore intercept, Plug and Abandon and Gas storage

TECHNOLOGY

MagTraC MWD Ranging™

LOCATION

California

CUSTOMER CHALLENGE

Casing damage prevented conventional access on two wells identified as potential "leak points" in a gas storage field. Both damaged wellbores were previously abandoned with shallow cement plugs, however the customer specified that deeper plugs were required to ensure zonal isolation. To properly and permanently plug and abandon these wells, both needed to be accurately intercepted at the appropriate depth. The only surveys available for the damaged wellbores were inclination only.

SCIENTIFIC SOLUTION

Remedial wells (one for each target well) were directionally drilled toward the damaged wellbores (targets) using Scientific Drilling's MagTraC MWD Ranging™ and gyroMWD. As the remedial wells approached the unsurveyed target wells, MagTraC was used to determine the distance and direction between the remedial wells and the target wells. MagTraC was then used to guide the remedial wells parallel to the target wells, and successfully intercepted as planned (4,835 ft and 5,967 ft).

The size, age and condition of the casing required close proximity to track the target down to intercept depth on each wellbore.

CUSTOMER VALUE

Using MagTraC, the customer was able to drill two remedial wells and successfully access two "inaccessible" wellbores at the planned depths.

The customer successfully plugged and abandoned both damaged wellbores across the deeper zone, mitigating concern of leakage from a gas storage zone.





