

AlphaST™ Single-Trip System Saves 10 Days Compared to the Previous Cement Plug Sidetrack

Objectives

- Sidetrack an onshore pilot well in a safe, timely manner after multiple unsuccessful attempts to sidetrack off cement plugs.
- Transition the main bore to the sidetrack bore so that a bottomhole assembly (BHA) with a polycrystalline diamond compact (PDC) bit can pass through without issue and continue the drilling operation.

Our Approach

- After unsuccessful cement plug sidetracks with another service company, the operator contacted Weatherford for other effective and time-saving options.
- Weatherford identified the AlphaST openhole sidetrack system as the operator's best choice because it can save trips compared to conventional systems.
- A certified supervisor and the AlphaST system were quickly mobilized to the rig.
- After the Weatherford supervisor deployed the system to the target depth, it was oriented and anchored up using the integrated IPP® injection production packer.
- The system was installed and the window was milled in a single trip so that the operation lasted only 52.5 hours, or 2.2 days. By comparison, the prior unsuccessful attempt with cement plugs lasted approximately 288 hours, or 12 days.
- The design of the system incorporates two mills, which resulted in a long window and reliable path to the new formation.

Value to Customer

- The AlphaST single-trip openhole sidetracking system saved the customer approximately 10 days of rig time valued at US \$530,000. This savings compares with the prior service company's sidetracking attempt using multiple cement plugs.
- The system created a long window for smooth passage of the subsequent drilling BHA with a PDC bit.



The Weatherford AlphaST system uses a lead mill (shown above) and a flex mill to make a quick departure from the original wellbore.

LOCATION

Permian

FIELD

Delaware Basin

WELL TYPE

Onshore, pilot

FORMATION

Limestone

HOLE SIZE AND ANGLE

8-3/4 in., vertical

KICKOFF POINT DEPTH

9,704 ft (2,958 m)

PRODUCTS/SERVICES

- Re-entry services
- AlphaST single-trip openhole sidetrack system

