

CASE HISTORY

FIRST 3" TWIN HEATSHIELD MEMORY GYRO RUN IN HIGH TEMPERATURE ENVIRONMENT

APPLICATION

Survey Validation

TECHNOLOGY

Memory Keeper Gyro

LOCATION

North Sea

CUSTOMER CHALLENGE

Due to the high temperature environment, in excess of 350°F, the customer encountered BHA failures. This required multiple sidetracks while drilling a 6" hole section. It was decided to use a 5" drill-in-liner to get casing across the problem section, which meant no MWD surveys could be recorded while drilling. Once the customer passed the challenging section, they required a high accuracy survey to confirm wellbore placement.

SCIENTIFIC SOLUTION

Scientific Drilling's Memory All Attitude Keeper system was utilized in the twin flask configuration. This configuration allowed both the high temperature lithium battery, and the Keeper gyro sensor to be protected from the wellbore temperatures that exceeded the limit of conventional survey tools. The memory system also allowed additional tools to be run in conjunction with the gyro survey, including a 3rd party CCL for depth correlation. The Keeper was initialized at 12,500' and a memory gyro survey was recorded from 15,962' to 17,062', across the previously unsurveyed section of the well. After reaching the bottom of the liner, surveys were collected back to 16,442' ensuring a 500' overlap with the inrun data for additional quality assurance.

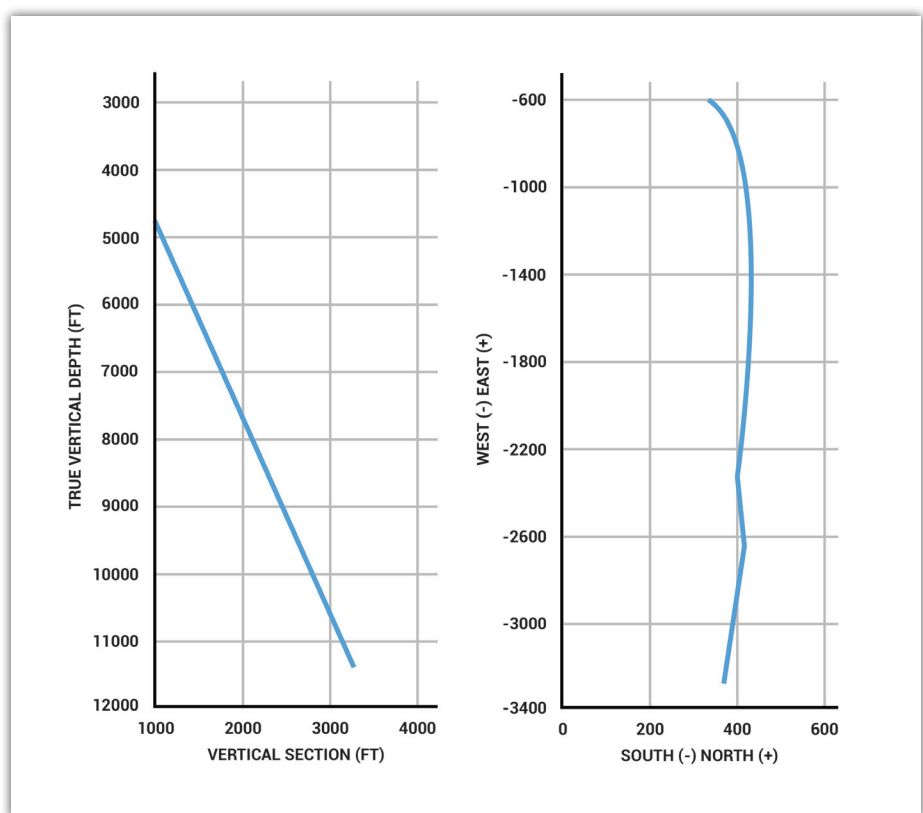
CUSTOMER VALUE

High accuracy surveys allowed the customer to validate the wellbore position in the target area mitigating any future anti-collision concerns. The high temperature rating of the twin flask system (500°F) allowed the survey to be collected in a wellbore where standard tools would not survive. The versatility of the Memory Keeper system allowed it to be run in conjunction with a planned 3rd party CCL and junk basket run. This ultimately saved the customer an estimated 12 hours of rig time by eliminating a separate wireline run.

CUSTOMER TESTIMONIAL

"Excellent support of operation throughout and textbook execution of gyro run with good quality data"

- Drilling Supervisor on location



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