With Tooltronix, Icefield Energy successfully completes latest GWD trial

ICEFIELD ENERGY SUCCESSFULLY DEVELOPS AND TESTS FIRST RETRIEVABLE GYRO WHILE DRILLING (GWD) SYSTEM

Our latest Meridian-GWD north-seeking tool has been integrated with the Tooltronix MWD system to report gyro attitudes while actively drilling.

This system harnesses the speed and accuracy of the upgraded Icefield Gyro with the reliability and consistency of the Tooltronix MWD system.

The new standalone Meridian-GWD system has undergone several field tests to date. The results shown here are from a recent test in the USA.

The high accuracy and reliability of the system enabled precise target accessibility and wellbore placement, making for efficient reservoir management and lower cost operation.

OVERVIEW

This system was sent out for field testing in the Southwestern United States and was sent downhole for a multi-day project.

The gyro was run into the hole and the well was kicked off to 5.0° inclination and 37.4° azimuth. Measurements were taken with MWD Directional (mag) module and Icefield Gyro sensors. The system was run for a Re-entry/ Slot Recovery job and the sensors were run in tandem down hole on dual telemetry.

The standalone Meridian GWD drilled over 4100 ft with no issues.

This deployment was used to demonstrate the full capabilities of the newly integrated system.

Testing was successful – the Icefield Gyro produced survey results which validated the MWD Directional module data for the entirety of the well.

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SURVEY DATA

Well Path Comparison

The following figure illustrates a comparison of the curves calculated from the MWD Directional (mag) module, Icefield Energy Gyro, and Planned paths.

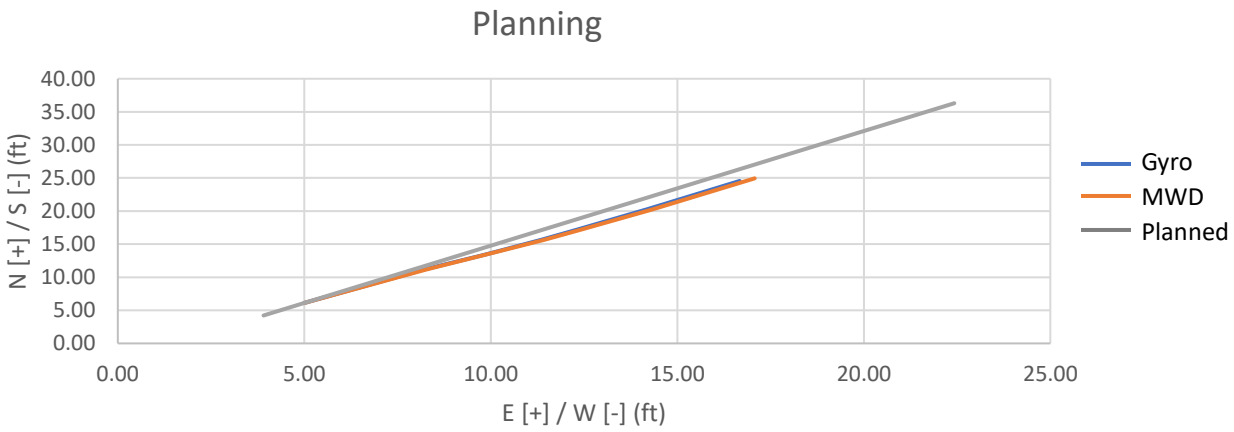

Figure 1: Planning view of curves

Azimuth Comparison

MWD Directional (mag) module and Icefield Gyro results are produced in tandem. A comprehensive look at the azimuths reported across the entire job is shown in the figure below.

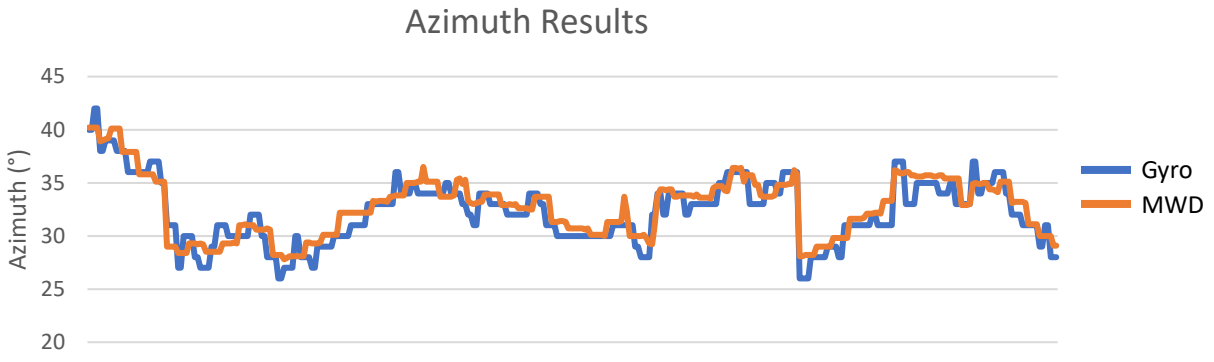

Figure 2: Azimuth results for Gyro vs MWD surveys.

The azimuth results are highly consistent when comparing both instruments in the tool string. From this trial it can be concluded that there is no degradation in the Icefield Gyro north-seeking performance when operating in this challenging environment.