ANTI-COLLISION (AC) CONCERNS: PLANNED VS ACTUAL

600 Well Study

CASE STUDY

OPERATOR OBJECTIVE

Looking to reduce the need for Survey Corrections, the client wanted to determine if the planned Anti-Collision (AC) risk was accurate. This 600 well study was used to compare the accuracy of the Planned vs Actual data.

RESULTS

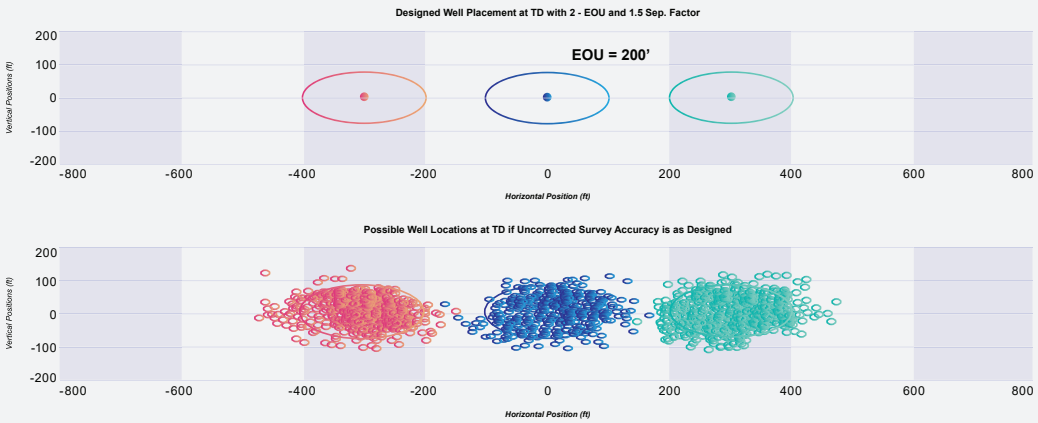
Planned Statistical AC Concerns

This chart illustrates the results of the planned AC concerns for a 10k' N/S well.

Assumed Results

5% of wells will be outside of stated Ellipse of Uncertainty (EOU) (200')

Statistically could result in 3 well crossings per 1,000 wells



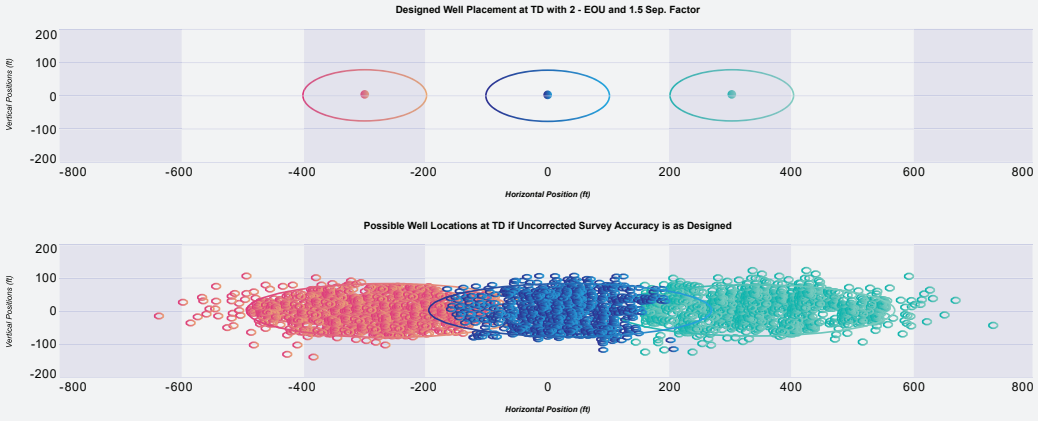
Actual Statistical AC Concerns

This chart shows the actual statistical AC case using the uncorrected data from the 600 wells. The data shows that the AC concerns are much higher than you may be assuming when you do not run survey corrections.

Actual Results

43.7% of the wells are outside of the Planned EOU (200')

Actual EOU is 440' vs 200' planned



Statistically could result in 68 well crossings per 1,000 wells

62% or 380 of the wells moved right and 38% or 280 of the wells moved left

**All wells in this study were drilled in the N or S direction*

Past performance does not guarantee future results. Results may vary.

FDIR IS THE ANSWER

FDIR (Fault Detection, Isolation and Recovery) is the industry leading automated survey correction software.

MWD surveys can be affected by multiple sources such as, magnetic interference from BHA design, misalignments in the tool, and reference field errors that FDIR corrects for in real time. These are error sources that cannot always be identified or solved for by an MWD's QA/QC of surveys.