FracView® Tool Data Analysis in Identifying Critical Breakout and Other Risk Factors

High resolution FracView® Downhole Tool Data is used to identify wellbore stressors at drilling rig sites.

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Challenge

This project focuses on identifying and addressing tensile and compressional stress fractures, symmetrical and asymmetrical breakout patterns, and the spectrum of drilling dynamics. By investigating these factors, the project aims to enhance wellbore stability, optimize drilling performance, improve equipment longevity, and improve final wellbore quality.
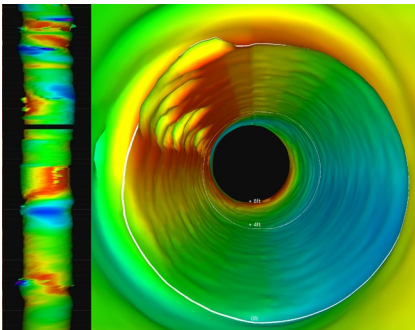
Details

Deep Valley Formation
Symmetrical and asymmetrical breakout, mild stick slip, stress induced fracture, vibration induced breakout.
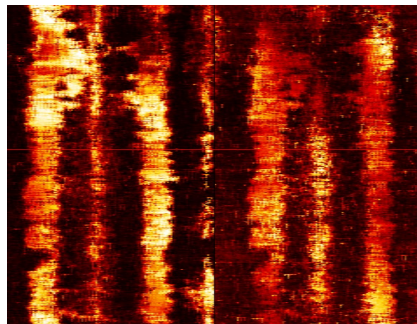
Permian Basin
Asymmetrical breakout, severe stick slip, tensile stress fracture, vibration induced breakout.

FracView® Borehole Rendering


FracView® Reaming Rendering

Results

Following the recommendations given by our team after reviewing the images from the SME (subject matter expert) will provide a better drilling experience. The drilling, casing, and fracking can benefit from the data our LWD tool collects. The process will become less costly and use resources and manpower more effectively to become more productive in the long run.

Breakout Data

Example of borehole breakout within a horizontal well.

Blue Force ® FracView® LWD Tool
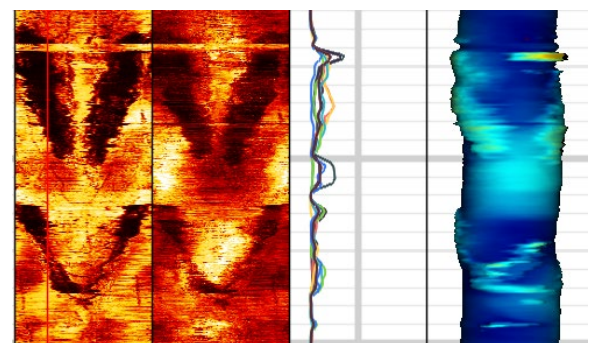
Borehole breakout | Failure of the borehole wall under compression as a consequence of the interaction of the local stress field and the borehole.