Reduce nonproductive time and risk while optimizing drilling performance

Geomechanical problems are associated with 40% of the drilling-related nonproductive time (NPT) in deep water and other challenging environments. Rapid changes in pore pressure and fracture gradient can lead to lost circulation, washouts, stuck pipe, loss of tools and equipment, additional casing strings, and unplanned sidetracks. A real-time measurement approach utilizing actual well data provides the best solution to accurately constrain predrill pore pressure and fracture gradient models.

Through a worldwide network of Operation Support Centers (OSC*), Schlumberger taps into the collective knowledge of the industry’s largest pool of geomechanics and drilling optimization experts. This dedicated team combines advanced processes and technologies to provide 24/7 support to minimize costly drilling hazards in real time.

Real-time modeling, monitoring, and risk mitigation

Through our interactive OSC network, Schlumberger experts are in direct communication—24/7—with your rig and office personnel.

Based on offset well information and our extensive global knowledge, Schlumberger geomechanics experts collaborate with your team to build a predrill mechanical earth model (MEM) to provide wellbore stability, pore pressure, and fracture gradient analyses and predictions for your planned drilling program. During drilling operations, geomechanics experts analyze in real time all available drilling, petrophysical, mud, seismic, and geological data to visualize current downhole conditions.

Working closely with your team, our experts validate and update the MEM with real-time data, and deliver actionable recommendations to avoid potential hazards using the DrillCAST* drilling hazard forecast for the next 24 hours.
Conducting geomechanical analyses while drilling utilizing the wide variety of measurements such as sonic, resistivity, density, pressure, and seismic in real time ensures better anticipation of potential risks.

**Deliverables:**
- DrillMAP* drilling, planning and management tool for your well, updated during drilling
- DrillCAST 24-hour forecast of the geomechanics risks for current drilling operations
- End of well report including an updated DrillMAP geomechanics roadmap identifying all risks or events encountered

Through Schlumberger real-time drilling geomechanics services, you will minimize events related to geomechanics, while reducing both risks and costs in complex drilling environments worldwide.

Before, during, and after drilling, our geomechanics experts provide a DrillMAP report in a user-friendly format. These reports, updated with real-time geomechanical data, provide a reliable roadmap both for your current well and future well plans.