

SERVICES

DRILLING AND COMPLETIONS ENGINEERING

HXR provides **Drilling and Completions Engineering** services to operators of all sizes, worldwide. We specialize in Well Design Studies (WDS), in which we take all of the relevant data available and use it to prepare an overall well design, by hole section, that will allow the well to be drilled with the best chance of success. Our Well Design Studies focus on:

- Maximized well trajectory – minimized DLS, casing wear, T&D
- Hydraulics optimization – takes into account formation pressure data, hole size, ECD concerns
- Rig equipment specifications – expected hook loads, SPP, torque, power requirements
- Tubulars – specifies required tubulars (tensile, M/U torque, casing connections)
- Casing points – formation pressure concerns, formation characteristics, well type
- Downhole tools – buckling analysis, motor-vs-RSS, special tools (underreamers, agitators, etc.)
- Drilling fluids – type, specifications, weight
- Swab/surge analysis – pulling/running speed schedules
- Expected torque and drag
- Cementing
- Casing/liner design – floated, mud-over-air, weight/size requirements
- Underbalanced drilling hydraulics
- Completions design analysis
- Wellbore stability
- Maximized hole cleaning design
- Formation pore pressure evaluation

The core of our Drilling and Completions Engineering services is our on-site Drilling Specialists. Using our specially developed engineering software suites, ERDPro™ and DEEPWATERPro™, and highly experienced in several specialized technical disciplines, such as ERD, deepwater drilling, and drilling fluids, our Drilling Specialists provide rig-site engineering support to ensure that the wells are being drilled as planned, liaise with third-party vendors to ensure that all desired drilling equipment/fluids are up to design specifications, and re-plan the wells, as needed, to bring them in line with actual drilling conditions encountered.

We specialize in the following types of drilling operations:

- Horizontal and Extended Reach Drilling
- Deepwater Drilling
- Arctic Drilling
- Unconventional Resource Development

OPERATIONS MAP



Call HXR before you start your next drilling project. From the North Slope to the South China Sea, we can help. We're good at it.