



ADVANCED WELL ENGINEERING TAILORED ANALYSIS

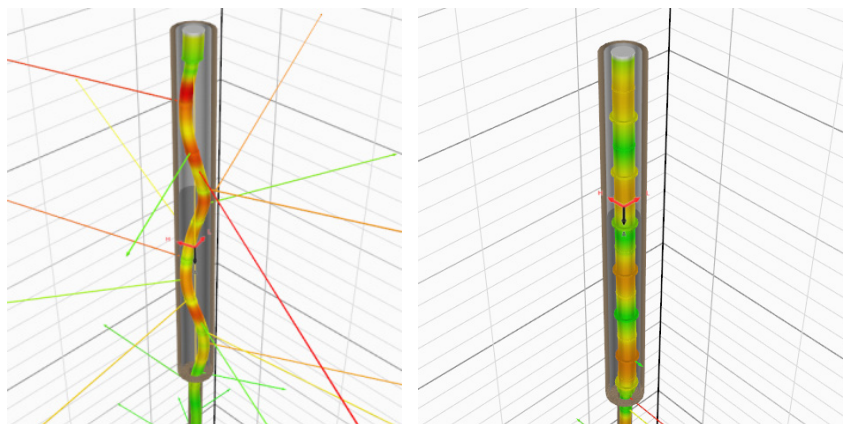
CUSTOM ENGINEERING STUDIES TO FULFILL THE UNIQUE REQUIREMENTS OF OUR CLIENTS & HELP DELIVER BETTER OUTCOMES

We offer tailored engineering analysis services to optimize drilling operations and enhance drilling performance. Our experienced drilling engineers use our proprietary DrillScan® Digital Solutions, which incorporate industry leading physics-based models, to deliver unmatched accuracy and efficiency. Our focus areas include directional drilling, drilling performance, tubular integrity, and well integrity.

Our directional drilling analyses help ensure that the planned trajectory is effectively achieved, minimizing tortuosity and ensuring they can be drilled with performance in mind. Our drilling performance analyses provide valuable insights into the drilling process to minimize drilling time and costs. We offer tubular integrity analyses to help ensure that downhole and drillstring components are functioning optimally and safely. By utilizing our distinct methodology for evaluating casing wear and annular barrier placement, our well integrity analyses aim to extend the longevity of your wells and prevent expensive remedial actions.

Our Tailored Analyses enable us to work closely with our clients to develop actionable recommendations that can lead to improved drilling outcomes. Contact us today to learn more about how our services can help you optimize drilling operations and achieve your goals.

Reduced the maximum Von Mises stress by 38% from initial to optimized well configuration



From this...

To this...


Case Study
(click to view)

TAILORED ANALYSIS

PROVIDES DRILLING EXPERTISE AND SUPPORT, UTILIZING ADVANCED PHYSICS-BASED MODELING, PROPRIETARY SOFTWARE/APPLICATIONS, AND THE EXTENSIVE EXPERIENCE OF OUR ENGINEERING TEAM TO OPTIMIZE DRILLING PROGRAMS AND HELP ENSURE SAFE AND EFFICIENT DRILLING OPERATIONS.

SERVICES CATALOG		
CATEGORY	SERVICE	OUTCOME
Directional Drilling	<ul style="list-style-type: none"> ▶ BHA & Bit Directional Pre-Analysis ▶ BHA & Bit Directional Post-Analysis ▶ Trajectory Reconstruction (Local Doglegs) 	Achieve a cost efficient and fit-for-purpose BHA through an independent benchmark of available market solutions using unique coupling of BHA and bit design against geology to predict behavior of any directional drilling system under all borehole and operating conditions
Drilling Performance	<ul style="list-style-type: none"> ▶ Drilling Efficiency Analysis (MSE/DOC) ▶ Drilling Dysfunction Diagnosis ▶ PDC Bit Performance Post-Analysis ▶ PDC Bit Design Enhancement ▶ Modal Vibration Analysis ▶ Forced Vibration Analysis ▶ Time-Domain Vibration Analysis ▶ Drilling Hydraulics Analysis 	Offering optimized BHA designs, equipment selection, and drilling parameters to help ensure faster and incident-free drilling
Tubular Integrity	<ul style="list-style-type: none"> ▶ Torque & Drag & Buckling Analysis ▶ Drillstring Fatigue Analysis ▶ Downhole Equipment Integrity ▶ Drilling Component Placement Optimization 	Help ensure well operations feasibility by performing mechanical drilling analysis that utilizes a proprietary stiff string with contact management/buckling model. (DrillScan® Digital Solutions)
Well Integrity	<ul style="list-style-type: none"> ▶ Casing Wear Analysis ▶ Wear Groove Interpretation ▶ Casing Design ▶ Annulus Barrier Optimization 	<p>Extend well lifecycle by selecting appropriate casing string by performing comprehensive casing design and accounting for casing wear (accurate calculation of cumulated 3D oriented casing wear based on proprietary Stiff String model).</p> <p>Helps ensure proper cement placement by performing casing deformation and standoff calculations and recommending optimal centralizer placement along the casing string</p>

CONTACT US

For more information contact an H&P sales representative today or contact us through our website at helmerichpayne.com/contact.

It's time to follow through on your drilling performance potential.