

## DIRECTIONAL SERVICES

C&J Directional Services provides our customers with experienced personnel, engineering guidance and fit-for-purpose equipment to provide the best overall solution to your drilling challenge. Combining technological advancements with deep local experience in drilling operations, C&J Energy Services offers a wide range of drilling services. Our team is able to carefully design, plan and execute drilling programs based on client requirements.

Our advanced measurement capabilities and state-of-the-art motors differentiate us from our competitors. Using accurate measurement while drilling (MWD) systems that provide robust telemetry data on a real-time basis, our experienced drilling technicians can place your well on target with industry-leading efficiency, even in the most challenging environmental conditions.

C&J's directional technology is powered by advanced Tellus drilling motors and directional tools. Our industry-leading drilling technology helps operators drill faster, steer the bit accurately and keep the drill string in the long horizontal zones common in shale plays. C&J's motors and guidance equipment are designed and tested in-house by experienced technicians and engineers at our Research & Technology Center.

C&J is known in the industry for leveraging experience, technology and equipment. Our directional services teams deliver the highest level of customer service—from well planning to daily and post-well reporting—with little or no lost time from day one.

### Our Services

#### Planning and Consulting

- Well planning software that includes the latest models for more accurate anti-collision and smaller ellipses of uncertainty
- Drilling optimization through BHA selection, fluid dynamics and formation evaluation that will help the operator stay in the zone and drill efficiently

#### Guidance Equipment

- Equipment that is rated to reliably perform in temperatures up to 175°C
- Ruggedized components for high shock and vibration
- Data rates three times quicker than previous generation of mud pulse tools
- Logging while drilling (LWD) symmetric propagation wave tool available

#### Conventional Motors

- New fleet of conventional directional motors with varied configurations for today's demanding drilling environment
- Hard rubber elastomers for increased torque and differential pressure
- Full-service repair and maintenance facilities located centrally in each district to service all downhole equipment locally

#### Ultra-Short Bearing Section (USBS) Motors

- With industry-leading torque ratings on all driveline components, we provide a reliable motor for all drilling conditions.
- PDC bearing configurations result in reliable and consistent performance in every environment
- Shortest bit-to-bend length (17 inches) in the industry. Using its unique bearing configuration, Tellus motors drill curves and laterals with offsets far less than the industry standard



C&J Energy Services

WE ARE C&J.

CJENERGY.COM