SPE-210271-MS

Drilling Performance Contract: An Evolution in the Partnership Between Operator and Rig Contractor



Nishanth Samuel; Andrew Stone; Sarah Kern; Randy Goll



Performance contracts are increasingly common in the drilling industry, especially in recent years. This incentivized contract structure, established as a partnership between operator and contractor, improves both well performance and operational execution while incorporating the rig contractor as an additional stakeholder in the operational performance of the well. Many performance contract styles exist, with one common goal: if targets are met, all parties involved benefit.

An increasingly common performance contract type is a tier-structure KPI (Key Performance Indicator) format. In this format, metrics in the form of KPIs are determined, and goal ranges are set in a tiered system. Prior research and data collection, requiring effort from multiple departments, is needed to determine achievable and stretch metrics. After the goals are agreed upon, field personnel, experienced rig leadership, and comprehensive technology support are determined, forming a foundation for success.

Establishing an effective communication structure is crucial for continuous improvement. This is achieved by regular performance improvement meetings, occurring among field and office personnel, for both the rig contractor and operator. Here, relevant performance data is shared regarding both successes and failures, with improvements needed for future wells captured and implemented. In this instance, a four-tiered incentivized structure with KPIs measuring cycle time ft/day, connection times, tripping speeds and skid times were used.

Over time, the performance contract structure benefits the operator/contractor relationship, with greater alignment on goals and responsibilities. A constant line of communication allows for frequent brainstorming and an eagerness to trial new methods, leading to a unique opportunity to demonstrate value with near-immediate results. Certain contractor technologies are at the operator's disposal as they benefit the well program, creating more openness to technologies not initially considered. Performance contracts allow for the continuous questioning of, "does this help us achieve our overall goal?" The constant focus on continuous improvement leads to performance benchmarks continually reviewed and fine-tuned with new data. There is no true "one size fits all" solution - despite everyone's best efforts, performance contracts don't all succeed at well release. Both the operator and contractor must continually be prepared to fail fast, identify improvement opportunities, make changes, and work together. However, all performance contracts ultimately play a part in innovative spirit while implementing fundamental changes in an evolving drilling industry and energy landscape.

Over the course of deployment, this contract structure led to increased and more consistent performance compared to the unincentivized rigs. Overall, the rig experienced an 8.2% increase in average feet drilled per day compared to the operator's prior year benchmark. 42% of wells fell within the half-standard deviation boundaries of the mean ft/day, a highly consistent zone. Additionally, the rig drilled two record-breaking wells in different target formations. We will explore how and why the performance contract structure can yield consistent delivery of high-performance wells.

