Drillwell Projects in Mature Fields: The Role of Program Execution

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The complex nature of well planning in mature fields requires understanding the broader multi-functional team goals, asset development, and timely integration of facilities engineering, public affairs, safety and regulatory issues. At US Production, this requires a Program Execution Geologist who facilitates Drill Well Project Coordination to ensure that all Production business objectives are achieved. Successful implementation of the planning and execution phases of these projects includes integration of technical work and close communication between all disciplines including: geologists, reservoir, drilling and completions engineers. Lastly, the PE Geologist also contributes key technical work to the final well design including pressure prediction, formation evaluation programs, target planning, well path design, real-time drilling surveillance, and post-drill learnings captures. Here, we will use several examples of how PE deals with complicating factors - drawndown sands, extended-reach or oddly shaped targets, geologic hazards, real-time program changes due to drilling events and complex formation evaluation contingency programs - to illustrate the importance of the PE role in this setting.