**Background**
During slimhole performance drilling in the Delaware Basin, iron fatigue and twist offs can be common and costly. Formation deflections are a regular occurrence and cause microdoglegs that introduce severe stress on drillpipe connections. Needing to improve the drillpipe fatigue life in this high–dogleg severity (DLS) environment, an operator decided to use the XPC* extreme-profile single shoulder connection.

**Technology**
- XPC extreme-profile single shoulder connection

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During a targeted test, the operator reduced twistoff events by 89% and increased fatigue life 10 times over conventional connections. This also boosted ROP by 34%. Due to the increased reliability of the connections, the operator was able to continuously push the performance benchmarks and achieve higher ROP.