Introduction

Operator in Southeast Asia selected the GB CDE 3P Connections for land drilling operations. Although these connections are designed for high fatigue life required for Drilling with Casing operations, in this case they were selected for their deep-stabbing, no-cross thread, and easy makeup features. Because of difficulties with similar wells in the same field, the high torque rating of the connections was desirable in the event the string would have to be rotated to help achieve target.

Connection Summary

The GB CDE 3P is machined from heavy-wall Coupling Stock. It features an innovative triple-taper in the box thread for enhanced fatigue resistance and reduced thread galling. At full power tight makeup, each pin nose engages in internal torque shoulder at the center of the coupling.

GB CDE 3P Couplings use GB 3P threads introduced to the industry in the mid 1980s. This robust threadform has an excellent field history and reduces rig time when running large-diameter, relatively heavy joints of casing.

Description of Operations

This 2,640 ft string of casing consisted of:

- 32 joints of 20" OD, 133.00 ppf X-80 with GB CDE 3P Connections and
- 28 joints of 20" OD, 133.00 ppf X-80 Casing with GB CDE 3P Connections

Casing was run conventionally on a typical, large-footprint land rig. The casing crew used large diameter, high torque capacity tong units for connection assembly. After joints were set in the elevator, they were carefully lowered allowing each pin to enter an open box. Once a pin was set in a coupling, a stabber in the derrick assisted with alignment as makeup was initiated. Makeup continued until pin shouldering was achieved. Shouldering occurred between 14,000 to 16,000 ft-lbs on the X-56 Casing and between 13,00 and 17,000 ft-lbs. on the X-80 Casing.

Not counting accessory joint makeup (such as float equipment joints), this 20” OD Casing averaged 6 min/jt. Considering that a mobile crane (typical of those used for building construction) was used for feeding pipe to the rig floor, this casing run rate is impressive.

All connections stabbed cleanly and made up without cross-threading. The Operator estimated this casing run was 2.5 X to 3X faster than previous casing runs where API BTC Casing was used.

Conclusion

The GB CDE 3P Connections demonstrated consistent makeup and improved casing run rates with conventional running operations.