LTA - FLOORMAN STRUCK BY SNUB LINE

WHAT HAPPENED:

Operations were in progress to retrieve a storm packer set at 364’ RKB with 121 stands 5” drill pipe hung below the packer. The storm packer-retrieving tool was made up to the first stand of drill pipe and three more stands of drill pipe were run. The forth stand was lowered until a single was above the rotary table and landed on the slips. The backup tongs were placed on the tool joint to back up the make up of the top drive system (TDS). As the TDS connection shouldered, the tongs bit and then momentarily released and immediately bit again, causing the 1” snub line to “whip” and strike the Floorhand on the back left side. The Floorhand suffered 4 cracked ribs, a bruised lung and kidney and a lacerated spleen from the snub line contact.

WHAT CAUSED IT:

1. The tongs slipped due to poor contact with the tool joint allowing slack to form in the snub line, which created the whipping effect when the tongs regained their bite on the tool joint.
2. There was not sufficient weight on the slips to hold the pipe against the rotational torque from the TDS with the rotary brake applied.
3. The length of the snub line allowed the tongs to rotate past 90 degrees to the pipe, bringing the snub line closer to the Floorhand.
4. The spin function was used to turn the TDS, which applies immediate rotation at 40 RPM until the connection shoulders and the TDS stalls at 4-5K ft/lbs of torque.
5. The RBS could have been used to back up the TDS.

CORRECTIVE ACTIONS: To address this incident, this company issued the directives to rig personnel:

1. The RBS shall be used to backup the make up of the TDS.
2. Should there be string configuration issues that restrict the use of the RBS, the tongs may be used to back up the TDS make up, provided that the rotation of the TDS is controlled at a minimal speed by selecting the drilling mode and reducing the drilling torque to the minimum setting.
3. All JSAs for operations where the TDS is made up are to be reviewed and modified to reflect these requirements.
4. All crews are to be briefed on these requirements, and this is to be documented.

The Corrective Actions stated in this alert are one company’s attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.