

Safety Alert

From the International Association of Drilling Contractors

ALERT 10 - 18

MAKING UP SUB ASSEMBLY RESULTS IN A FATALITY

WHAT HAPPENED:

The rig crew was using the top drive and back-up tong to make up the sub assembly. The pin end of the crossover sub was set into the bit breaker plate. As torque was applied to the sub assembly with the top drive, the crossover sub pin released from the bit breaker plate allowing the drill string and tongs to strike the rig floor crewman pinning him against the "A" leg of the derrick.

WHAT CAUSED IT:

- A snub line was not in place on the cross-over sub while making up the sub.
- The torque from the top drive caused the drill string to bow.
- Power to the top drive was not shut down quick enough.
- Using the top drive to make up the connection may have caused the torque to the drill string.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

- Rig crew personnel were instructed to use a snub line on crossover subs when making them up.
- Rig crew personnel were instructed to use a chain tong to make up the sub assembly.
- Rig crew personnel were instructed to not torque the connections of the BHA until the entire BHA, including the air hammer, is made up with chain tongs.
- Once all BHA connections are made up and tightened with chain tongs, lower the BHA down the hole and torque each connection as appropriate.
- After setting the tong(s) and before applying final torque to connections, rig floor personnel should move to a safe location away from the BHA and tongs and behind a barrier.

IADC Note: See the safety meeting topic "Making a Trip" in the IADC "5 Minute Safety Topic" book. Also see IADC HSE Reference Guidelines Section 3.8.

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.