



Safety Alert

From the International Association of Drilling Contractors

ALERT 01-07

Foot Caught in Drawworks Braking System

WHAT HAPPENED:

The crew was slipping and cutting drilling line as per ton-mile program and had finished cutting the drilling line. While re-attaching the drilling line to the drawworks drum, the motorman was standing on the equalizer bar for the braking system and was pushing the drilling line under the drum to a floorman. The floorman was reaching over the top of the drum to pull the drilling line to the drilling line anchor hole in the drum. The motorman's foot slipped off the equalizer bar and went down between the brake shaft and cam for the crown block safety device. At the same time, the floorman who was reaching over the top of the drum, inadvertently bumped the crown block safety device. This activated the braking system and caught the motorman's foot between the brake bar and the cam.

WHAT CAUSED IT:

A pre-tour safety meeting was conducted and the jobs of the day were discussed. Prior to cutting the drilling line four hours later, a pre-job safety meeting was held without all personnel involved. The job procedure was reviewed but the hazard identification checklist was not utilized. The rig operating procedures did not specify that the crown block safety device be de-activated or isolated during slipping and cutting operations.

CORRECTIVE ACTIONS:

- A Drilling Line Slip and Cut Job Safety Analysis should be developed and utilized at pre task safety meeting prior to cutting the drilling line. (Note: Due to the number of procedures involved in cutting the drilling line, separate JSAs may need to be developed for each procedure.) See the IADC Accident Prevention Guide Section 1 – 4 & 1 – 9 for procedures on developing JSAs and Section 3.1 of the APG for procedures on Lockout/Tagout.
- The driller and toolpusher should hold structured, pre-job safety meetings prior to all new tasks and ensure that all personnel involved are present.
- The slip and cut procedures should include the isolation of the crown block safety device.
- The air supply to the crown block safety device should be shut off at the 3-way valve.
- The crown block safety device should be moved out of the way prior to commencing the Slip/Cut operation.
- **Be sure that the crown block safety device toggle is repositioned (reset) and the 3-way valve opened once the drill line is attached to the drum.**
 - The traveling block should be raised to the upper safe limit in the derrick and the crown block safety device adjusted so that it will trip should the traveling block be raised above this position.
 - Lower the traveling block, turn on the air supply to the crown block safety device and raise the blocks slowly to make certain the toggle actuates properly. Adjust the toggle as necessary and retighten the locking bolts.

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.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices.
Copyright © 2001 International Association of Drilling Contractors. All Rights Reserved
Issued February 2001