



Safety Alert

From the International Association of Drilling Contractors

ALERT 10 – 33

WORKER'S ARM CAUGHT IN MUD BUCKET

WHAT HAPPENED:

The air slips were changed out because they were not setting properly. In order to pull the slips away from the rotary table, the air line from the mud bucket was removed and fitted to the rig floor winch. (The sole purpose of that particular air winch is for use with the air slips.) When the crew removed the air hose from the mud bucket and connected it to the air winch, they operated the control valves on the mud bucket to bleed off the residual pressure in the air line. The driller was setting down the weight of the drill string, getting ready to back out a stand of drill pipe when he observed a rig floor worker (Injured Person [IP]) holding a dope brush with his hand inside the mud bucket. The driller shouted a warning and at the same time the mud bucket closed, trapping the man's arm as the air supply to the bucket was turned back on.

WHAT CAUSED IT:

- The other crew members did not know that the IP was in the front of the mud bucket with his hand inside to dope the mud bucket seals.
- The mud bucket closing speed is approximately 3 seconds.
- The design of air hose arrangement was inadequate.
- There was poor communication between the IP and the man reintroducing air supply to the mud bucket.
- Inadequate instruction had been given to the crew personnel on how to isolate and de-isolate the mud bucket

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

- The company conducted retraining with all rig crews on the safe use of the mud bucket.
- Corrected the connection / disconnection of air supply to be highlighted with all crews.
- Warning chevrons were painted on the front of mud bucket at the opening
- Installed an independent air supply for the air winch.
- Modified the controls of the mud bucket so that two valves have to be operated simultaneously in order to close the mud bucket.



Demonstration of IP Hand inside the Mud Bucket



Mud Bucket Control

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.

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