

Safety Alert From the International Association of Drilling Contractors

ALERT 04 - 44

ENERGIZED POWER TONGS RESULT IN FOOT INJURY

WHAT HAPPENED:

The operation at the time was running casing, which necessitated the use of hydraulic power tongs. The tongs were suspended by an air hoist and left energized between connections. During a break while running the casing, the decision was made to relocate a bag of protectors to the 'V' door. The hydraulic tongs were lowered to the floor left energized with the door open the tugger was removed. The tugger was then used to move the bag of protectors. Once the bag of protectors had been relocated it became necessary to hook the tugger back up to the hydraulic power tongs. A floorhand assisted the Tong Operator to reconnect the air hoist onto the power tongs and in so doing the floorman placed his right foot between the door openings. During the process of hooking up the air hoist, the spring on the lifting assembly engaged causing the gear mechanism to rotate which resulted in the floorman's foot being caught. The resulting injury led to the partial amputation of the right foot forward of the ankle.

WHAT CAUSED IT:

The tongs were left energized while other work was being performed on the rig floor. When reconnecting the air hoist, the injured party engaged the tong throttle, while his right foot was in the open throat of the tongs, causing the rotating gear to contact the top of the right foot. The tong was not equipped with a door interlock device, which prevents the operation of the rotating gear if the door of the tongs is open.

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

- Whenever it becomes necessary to stop the use of **ANY** power tongs for a time period longer than that between normal connections during the running of tubulars, the power unit will be shut off in compliance with the appropriate policy.
- Pressure to be bled off from the lines so as to eliminate any power source to the unit.
- A thorough review of JRAs and procedures covering the use of hydraulic power tongs.
- Please ensure that this is discussed in pre-tour and weekly safety meetings until everyone is fully aware of it.

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.