

FATALITY ALERT

On May 23, 2016 a rig crew consisting of 4 employees were working at a water well drilling site. They were tasked with drilling two water wells for the property owner. Drilling for a water well consists of setting up the rig, tripping pipe, mixing mud, breaking and making connections, and running casing.

At the time of the incident, two employees were at the front of the rig repairing the mud pumps. Two employees, one being the victim (Tool Pusher) and the other a driller, were at rear of the rig where the drilling occurs. The crew was experiencing problems with their pump and were not getting the proper flow of drilling mud down hole. Additionally, the hole that they were drilling was collapsing onto the drill stem. The crew began to remove the drill stem so that it would not get stuck or lost down hole. The process began with the victim placing a 48" steel pipe wrench onto the grooves of the Kelly, in order to break the connection from the sub. In order to break the connection, the pipe wrench was positioned so that the handle rests on the rear left roller of the derrick. When the pipe wrench was properly positioned the rotary table was run clockwise to break the connection. When the driller was doing this, he inadvertently went in the wrong direction, causing the pipe wrench to strike him and the victim.

Significant Factors

- The driller involved had been in his position for about 2 years only drilled 2 holes with the rig prior to the incident.
- Victim was in a position that made the pipe wrench at the same height as his head.
- Victim was not using a step when placing the pipe wrench onto the sub.
- Victim was not wearing a hard hat.
- The pipe wrench was being used in a manner that is against the manufacturer's instructions.
- Training was not adequately documented.

Recommendations

- Use hand tools according to the manufacturer's instructions.
- Use tongs in order to break the connection of a sub from the kelly.
- Maintain and inspect all electrical equipment.
- Assess the workplace for hazards that require the use of personal protective equipment.
- Certify that an assessment of the workplace for hazards that require the use of personal protective equipment has been conducted.
- Enforce policy on the use of personal protective equipment.
- Visually inspect all fire extinguishers on a monthly basis.
- Have first-aid kits on site.
- Inspect the doghouse and rig for hazards.
- Maintain first-aid kits.
- Keep and maintain OSHA 300 and 300A logs.
- Brief all employees about the fatality.