



Safety Alert

From the International Association of Drilling Contractors

ALERT 07 – 31

LTI—DRILL LINE SPOOL PINCH POINT

WHAT HAPPENED:

While the rig crew was attempting to slip and cut the drilling line, the Assistant Driller stood on the flanges of the side of the drill line spool. He did this to use his weight to turn the spool too spool off drilling line for slipping drill line. Once the spool started turning he was not able to get away from the spool and the momentum of the drum kept it turning. The turning drum trapped his foot between the spool and the spool stand frame, pinning his right foot. X-ray revealed no broken bones.

Outcome/Potential Outcome:

Bruised and swollen foot/broken foot/toe amputation

WHAT CAUSED IT:

- The **energy source** in this incident is the moving spool.
- The spool turning past the stationary stand frame created a “pinch point”, where the employee’s foot became trapped, severely bruising his foot.
- The Assistant Driller did not recognize the “pinch point” hazard.
- No JSA had been developed for the task.
- We have learned that we must not take for granted because it’s a routine task and personnel won’t get hurt. In fact many injuries occur during routine tasks.

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

- JSA was developed for this operation and the pinch point hazard was addressed.
- Rig supervisors and employees were instructed that proper planning is always the best way to eliminate employee exposure to hazards.
- Ways to address this energy source are to guard the spool or ensure personnel are standing a safe distance away from the spool while it is in motion.
- Rig personnel were instructed to review a mechanical means for turning the drilling line spool.
- The STOP Program helps us identify “positions of people” that can result in an exposure to a hazard. Personnel trained in STOP take a STOP Observation Card and discuss the Positions of People section in a pre-job safety meeting to determine what hazards exist. Crewmembers are to ask questions developed from the prompts on the form itself, such as,
 - “What risks exist for people to strike against objects?”
 - “What risks exist for being struck by objects?”
 - “What risks exist to be caught in, on or between objects?” “What risks exist for falling?”
- **We should always look for safe ways to mechanically perform tasks instead of using muscle. For example, some drilling line spools have electric spoolers to spool on and off line. Some spools are located where the drawworks pulls the line off the spool during the slipping operation instead of having personnel manhandle the line. Another mechanical assist is to have the loader/forklift pull out the necessary drilling line before slipping operations begin. The rig floor winch with a snatch block works well in pulling the line off the spool, all taking place on the rig floor, without risk of strain or sprain, or exposure to the uncontrolled energy released with the of motion of the rotating drill line spool.**

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

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