

Fracture From Inappropriate Use of Pipe Wrench

Incident

Upon the completion of a drill hole, a Driller moved the drill mast down to an angled position to inspect the bit. The core barrel was still fitted to drill head and clamped above the drill bit and reamer. The Driller decided to remove the drill bit for cleaning. The Driller then attempted to remove the drill bit with the aid of an aluminium pipe wrench (or Stilson), but the drill bit was too tight to undo on his own, so he asked the Driller Assistant for help. The Driller Assistant informed the Driller that the position of the pipe wrench onto the core barrel was too low for his height (i.e. he was unable to apply enough body weight to the wrench handle) and so he asked the Driller if he could move the core barrel to a higher position. The Driller lowered the drill mast to the horizontal position and the height of the drill bit above the ground was now approximately 1.8 meters. The Driller Assistant fitted the pipe wrench to the drill bit and the two men attempted to undo the drill bit in a downward motion. The Driller Assistant being much taller than the Driller had good body position whereas the Driller was unable to maintain a balanced stance. During the action of undoing the drill bit the Driller's right foot slipped forward causing him to lose his balance and fall backwards. As he fell his body twisted transferring his whole body weight onto his left ankle resulting in a fracture to his fibular bone just above his ankle.

Re-enactment



Causes:

- No risk assessment was conducted prior to the work activity.
- Improper position for task – Driller was over reaching.
- Improper placement of equipment (core barrel) – due to height disparity of Driller and Driller's Assistant.
- Inadequate work standard – No Standard Work Procedure in place for the specific task.
- Failure to identify the hazard and apply the Golden Rules.

Corrective Actions:

- Develop a Standard Work Procedure for removal of the drill bit from the core barrel held in the rod clamp.
- Provide and conduct Boart Longyear's Risk Assessment Training package to all crews.
- Provide and conduct Boart Longyear's Hazard identification training package to all crews. **R.E.A.C.H** – (Recognition, Evaluation and Control of Hazard).
- Issue and provide training to all crews on new Standard Work Procedure.
- Site Communication – alert all crew of the circumstances leading to the incident at safety meetings.

Consider the following Golden Rules when performing this task:

Golden Rule #1: Stop any unsafe act immediately!

Golden Rule #3: Conduct a risk assessment before starting any activity!

Golden Rule #5: Maintain a safe body position at all times!