

Contact With Monkey Board Failure to follow Proper Procedure

SAFETY ALERT

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Details

Release Date: October 23, 2012
Incidence Type: Failure to use proper procedure
Country and Region: Alberta, Canada

For more information on this event,
please contact: safety@enform.ca

Description of Incident:

A night Driller, was in the process of drilling and making connections. He had the pipe handler on the top drive turned to the position to link the elevators to the V-door, as the elevators need to be turned towards the V-door, due to minimum clearance between the extender support beam for the top drive and the draw works, while working the stand as low as possible.

- The rig crew was making connections with drill pipe from the V-door, due to drilling down all the stands from the derrick.
- The Driller had worked the string three times and had blown the air horn to alert the floor hands that it was time to make a connection on the drill floor.
- The Floor hand, made it to the drill floor and proceeded to open the prefabs door at the V-door gate. After the gate was open, the floorhand headed down the door to the operating controls on the catwalk, in order to operate the trough.
- The driller did not remember to float the bails and proceeded to raise the top drive above the monkey board, with the bails fully extended in the direction of the V-door, resulting in the elevators striking the pads, fingers and diving board.
- While lowering the string, the driller noticed that the weight on the weight indicator fluctuated from its last noted weight; consequently, he stopped the blocks to investigate the sudden change in weight.
- When he walked out on the drill floor and looked up, he noticed the damage to the diving board, pads and fingers on the driller side of the board.
- The rig manager, was notified. The monkey board area was taped off and marked as restricted. The rig manager donned a safety harness and went up the ladder; took pictures and proceeded to gather statement, while he contacted the field superintendent.

What Caused It:

Immediate Causes

Substandard Act:

- **Improper Placement** – The position of the bails was incorrect position, which allowed the elevators and bails to come into contact with the monkey board.
- **Using Equipment Improperly** – When in proximity to the monkey board, the bails must always be in a neutral or central position to ensure they do not come in contact with any other part of the Derrick structure or monkey board.
- **Failure to Follow Practice** – The driller is in charge of the operation of the equipment on the drilling rig and must ensure that good practices are followed and used on a daily basis.

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- **Failure to Identify Hazard / Risk** – The driller did not recognize that leaving the bails out increased the potential of a severe strike to the monkey board. Whenever the blocks are hoisted the driller must look for the hazards and potential incidents to ensure that the equipment and workers remain safe.
- **Failure to Check and Monitor** – The driller stated that he was watching the weight indicator, however, he did not attempt to look up the derrick to confirm that the bails had been floated into a central position. Due to the bottom beam of the torque tube, it is difficult to see the top drive as it is hoisting.
- **Failure to React / Correct** – The driller was aware of the lack of vision from the beam and should have worked with the rig manger to implement a Safe Operating Procedure (SOP) to address the visibility issue. During the investigation, the investigator stood at the driller's controls to view the work area, acknowledging that the beam may impair site of vision.

Substandard Condition:

- **Inadequate Barriers** – There is no barrier to assist or stop the top drive from contacting the monkey board, when the bails are turned around to the pick up off the V-door.
- **Inadequate Procedure** – There was no SOP to ensure that all the drillers on the rig know and understand the correct procedure.
- **Inadequate Preparation / Planning** – The driller did not utilize a good plan to assist his crew in addressing when they are needed on the drill floor to make a connection, other than blowing the air horn, which was found during the investigation to be inadequate and hard to hear around the rig. The inadequacy of the air horn was well known and understood from interviews with other crew members and the driller. Corrective action is required to ensure the operation is a success and all hazards identified, assessed and controls put in place.

Corrective/ Preventative Actions:

Follow the Proper Procedures –

- **Proper Placement** - Whenever the top drive is to be hoisted, the bails need to be floated; to ensure that they have moved to a central position to avoid contact.

Use Proper Equipment –

- **Proper Practices** - When good practices are utilized, the safety of workers and the equipment can be properly managed. The driller must ensure that bails are linked in / floated to a neutral / central position. If for any reason the driller gets distracted or is unsure of the position of any of the equipment he is operating, he must stop and re-evaluate hazards.
- **Identify Hazard/ Risk** - Whenever the blocks are hoisted the driller must look for the hazards and potential incidents to ensure that the equipment and workers remain safe.
- **Engineered Controls:** There are a number of engineering options to ensure adequate barriers are in place. One engineered control is to move the extender support beam up to a position to eliminate the need to turn the pipe handler when drilling. The other engineered control could be the Rig Smart System that incorporates sensors to warn or disable hoisting if the elevators are in a potential collision path with the monkey board.
- **Preparation and Planning** - A rig crew must develop a SOP and ensure it is written out for all workers to review and utilize, as a reference to job tasks, responsibilities and accountabilities of all workers involved in the task. The SOP must address the hazards and have suitable controls in place, to ensure equipment damage and safety is upheld at all times on the Company work site.