

OIL INDUSTRY SAFETY DIRECTORATE
NOIDA

S A F E T Y A L E R T

E&P (Offshore)

No. 13/09

Title: Drill pipe stand hit by top drive resulted into fatal accident

Location: Rig Derrick Floor

Activity Type
(Result/outcome): **Fatality**

What happened:

During pulling out of drill pipe stands, a stand after being pulled out was stacked on the rig floor. Suddenly the stand jumped up with a loud sound. The rig crew noticed the drops of blood falling from monkey board to the rig floor. Driller looked up from Driller's cabin and found that derrick man was lying on the monkey board. The injured derrick man was brought down from monkey board. He was bleeding from nose, mouth and forehead. The IP was sent to hospital by chopper, where he was declared dead.

What caused it:

- Driller saw that the pipe had been secured by the derrick man, but did not ensure that it had been adequately pulled towards monkey board. He lowered the TDS (Top Drive System) presuming that the passage is clear from any obstruction. The guard of the TDS hit the box end of drill pipe stand, which initially got bend like a bow and then struck the monkey board & derrick man on getting released from TDS.
- As the Air Winch was being used to pull the stand, the second possibility may be that the air winch line got slackened accidentally by the derrick man and the drill pipe moved towards TDS path. It obstructed the path of TDS & resulted in getting pressed down by TDS guard.

Corrective actions:

- There should be a system in place, through the use of close circuit camera, hands free walkie talkie etc., which would enable the driller to confirm that TDS movement path is clear prior to lowering the same.
- In absence of such hardware, manual confirmation by driller himself, prior to lowering of TDS should be ensured.
- The SOP for this operation shall explicitly mention how it is to be ensured that TDS movement path is obstruction free.

It is provided for information purpose. This information should be evaluated to determine if it is applicable in your operations, to avoid reoccurrence of such incidents.