NEAR MISS – DROPPED CASING WHEN ELEVATORS NOT LATCHED CORRECTLY

WHAT HAPPENED:

A Near Miss incident occurred when a joint of 13 3/8 inch casing fell down the V-door and continued off the catwalk, when the single joint casing elevators (SJE) were not latched and pinned correctly. The incident occurred on the 60th joint of casing that was run, using a casing running tool. With the winch line and sling removed from the joint of the casing, the Driller was signaled to pick up the casing. When the weight was taken up on the casing elevators, the elevators opened and the casing fell out and eventually came to rest against the wire line unit off of the catwalk.

The consequence of this incident was slight damage to the wire line unit but with potential for a fatality.

WHAT CAUSED IT:

A check of the casing elevators after the incident, acknowledged that the elevators did not fail and that the cause of the incident was human error. The investigation team established that the SJE were partially latched. This left enough room to insert the pin behind the latching device, instead of its proper position in front of the latching device, acting as a retaining safety pin. The safety retainer pin was still inserted after the incident. The worker latching the elevators on the rig floor did not know the elevators were not fully latched.

- The Driller was not able to see the casing on the V-door or the elevators from the driller’s console. His vision was obstructed by four stands of 8 inch Bottom Hole Assembly (BHA) and four rows of drill pipe which was stacked in the fingers on the driller’s side derrick, because the off driller side was full of drill pipe. The driller relied on a “thumbs up” signal to pick up the blocks.
- It is not possible for the latch to open on the casing elevators if latched and pinned correctly. It is possible to not fully latch the casing elevators, allowing sufficient room to insert the retainer pin behind the latch.
- There was no second person assigned to check if the casing elevators were latched and pinned correctly.
- The JSA reviewed prior to commencement of the job was a generic JSA and made no reference to the hazard of the elevators not latching, or the requirement for a second person to check for proper attachment.
- The rig was not equipped with any form of secondary safety device i.e. stopper bar at the base of the V-door to prevent casing etc. from sliding down the V-door through the catwalk as it did in this case.
CORRECTIVE ACTIONS: To address this incident, this company did the following:

- Casing elevators changed out for a type considered to have a better latching device. Pin inserted through not in front of the latch.
- Procedures to be reviewed and amended so that:
  - A second person is assigned to check that the elevator is latched correctly and the pin is inserted correctly.
  - Driller must have a clear view to the V-door at all times. When the pipe of bottom hole assembly is racked in the fingers, it will prevent this. The pipe should be racked differently to allow a clear view or laid down when this is not achievable.
- A rig-specific JSA is to be developed which outlines all the potential hazards identified in the investigation report.
- A “stopper” device design, to be agreed by Management, which when fabricated and fitted, will prevent pipe or casing travelling down the catwalk uncontrollably if there is a elevator failure or human error.

IADC Note: For additional information review IADC Alert 01-04.