ALERT 08 – 42

DROPPED OBJECT: KELLY DISCONNECTS FROM HOOK

WHAT HAPPENED:

During drilling of the surface hole (12 ¼”), the driller made a connection and started to wash / ream down to bottom. Due to tight hole conditions, the drill string stopped two feet before the bushings were able to be set into the rotary table. The driller received direct instructions from the company representative to operate the kelly spinner to over come the tight hole and the drill string did move down for ½ foot. The driller was re-instructed by the company representative to move the string up and down. During the process of moving the string down, the drill string reached a bridge, but the driller didn’t notice it. This resulted in the string bouncing and the swivel hitting the hook, causing the latch to open and the kelly to drop to the rig floor resulting in damages to Kelly, rig floor handrail, mast ladder and driller’s panel.

Before repair

After repair

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.
WHAT CAUSED IT:

- The rig was provided with a 220 ton swivel instead of 150 ton swivel. Due to this, the bail diameter of this swivel is bigger than the hook space could accommodate. The larger bail made it difficult to close the hook without using force. This mismatch was not assessed by the engineering team or the rig crew. Failure to follow Management of Change (MOC) procedures.
- The air hoist was attached to a whip check that was used to close the lock of the hook latch. This resulted in bending the locking pin, preventing the pin from fully engaging. (Deviation from standard procedure).
- The driller was not paying attention to the hook load (weight indicator), so hitting the bridge caused the kelly to bounce.

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

- Swivel was replaced with one that fit the hook opening. In addition the kelly was replaced.
- The latch lock was repaired and the hook pin was inspected.
- Rig supervisors were instructed that any change in equipment shall be accompanied with a risk assessment in order to identify hazards and consequences. Refer to the company’s. “Design Control and Development”, Procedures and instructions Manual.