

Safety Alert From the International Association of Drilling Contractors

ALERT 09 – 22

AIR WINCH MOUNTING BOLTS FAILURE

WHAT HAPPENED:

While running the BOP stack the air winch was pulled from its foundation. The air winch came to rest on the handrails overlooking the Moonpool, which is approximately 4 feet in front of the air winch's original location. There were no injuries associated with this incident.

WHAT CAUSED IT:

- 1. The air winch operator was new to the rig and was not experienced in operating the air winch while running the BOP stack.
- 2. The tattle-tail (indicator) to maintain mid-stroke on the tensioner was a rope tied to the tensioner with a shackle tied to the bottom of the rope. This rig-designed indicator was difficult to see due to the various other lines in the same vicinity.
- 3. The tensioner bottomed out and pulled the air winch from its foundation.
- 4. The bolts securing the air winch to the foundation had pulled out of the nuts.
- 5. Bolts were 3/4" in diameter and should have been at least 7/8" in diameter.
- 6. Although all 16-bolts were of Grade-8 strength, they were corroded and did not have full nuts.
- 7. There were only 2 to 4 threads made up on each of the nuts.

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

- Action Items Maintenance Department
 - 1. Modified the Preventative Maintenance (PM) program for all rigs to require inspection of all air winch foundation bolts for corrosion, proper size, and make-up during monthly air hoist PMs.
 - 2. Added to the annual non-destructive examination (NDE) inspection a requirement to inspect the air winch bolts for proper grade and condition, along with the integrity of the air winch's foundation.

• Action Items – Rig

- 1. Installed a rig phone by the air winch to establish better communications with the Driller.
- 2. Ensured mid-stroke for the tensioner can easily be seen by the air winch operator. If not, rig personnel were instructed to design a more reliable means of tracking the position of the sheave cluster.

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.