



Safety Alert

From the International Association of Drilling Contractors

ALERT 99-19

TOP DRIVE INCIDENT

WHAT HAPPENED:

A drilling rig recently experienced a major incident when the gooseneck and kelly hose became completely detached from the top drive. The kelly hose was chained to the frame of the top drive, but the chain parted when the gooseneck separated from the top drive with 5000 psi pump pressure. This caused the entire gooseneck assembly and kelly hose to fall to the rig floor. Before the driller could shut down the pumps, the entire rig floor area was sprayed with oil-based mud. Fortunately, there were no injuries.

CORRECTIVE ACTIONS:

1. The top Drive manufacturer distributed a product bulletin. The drilling company instructed all rigs using top drives to ensure that chains used to secure the gooseneck assembly are replaced with 7/8" safety cables.
2. The contractor involved formed a Top Drive Committee made up of personnel from various groups. The purpose of this committee is to monitor operations and engineering systems for top drive use.
3. All personnel working on the rig floor should be alerted when pressure is applied to the top drive.
4. Floor personnel should understand the operation of the top drive and should also know which components to visually inspect during daily operation.
5. Top drive components should be regularly inspected in accordance manufacturer's specifications.
6. Rig floor evacuation should be practiced (drills) so in such cases a safe evacuation will occur.
7. Spill clean-up materials should be readily available to clean up environmental hazards.

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.

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