Safety Alert

From the International Association of Drilling Contractors

ALERT 12 – 25

SNAGGED HOIST LINE RESULTS IN FRACTURED VERTEBRAE

WHAT HAPPENED:

During cementing operations while utilizing the hoist line on the rig, a floor hand was being hoisted up the mast to tighten the manifold for the cement head. The crew decided to use a 20 foot (6m) extension chain, which was connected to the hoist line, in an attempt to keep the swivel connection above the hoisted employees head while working at any given height. While the floor hand was being hoisted, the swivel connection got caught under the casing stabbing basket on the driller's side. Neither the floor hand nor the employee running the hoist noticed the swivel had snagged. Not realizing that the swivel was snagged, which put extreme tension on the lifting cable, the employee running the hoist continued lifting the floor hand to the required height. Once the swivel connection was pulled out from under the stabbing basket, the floor hand was thrown upward and then dropped approximately 3 feet (91cm) to the end of the slack in the hoist line. After the floor hand dropped to the end of the slack, it caused the hoisting cable to jerk him resulting in a compression fracture to his spine.

WHAT CAUSED IT:

- Neither the employee running the hoist nor the injured employee noticed that the swivel was entangled. (The employee running the hoist was in his second hitch in the drilling industry and was new to the company.)
- With the extension chain placing the swivel connection 20 feet (6m) above the hoisted employees head, which was essentially 40-50 feet (12m–15m) above the rig floor, the swivel connection was at a distance too far away for both employees to keep a constant visual on the swivel and keep it free from hanging up.
- The injured employee was wearing his fall protection; however, with the slack in the line, the fall protection did not engage until the slack was taken out during the fall. Under normal conditions the fall protection would have engaged within 3 inches (8cm).
- Inexperience and lack of supervision. The tool-pusher was on the drill floor; however, he was engaged with another task and was not directly supervising the lift.

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

- The crew was reminded that a JSA for this particular task shall be updated and or reviewed for this operation and should point out possible hazards during the hoisting of personnel.
- All personnel were reminded that during any operation involving the hoisting of personnel, supervision by the tool pusher is required and mandatory.
- The tool pushers were reminded that only experienced rig personnel or the tool pusher are authorized to operate the hoist during the lifting of personnel. No exception!
- All personnel involved in the hoisting operation shall remain in constant communication and stop the job if they see an unsafe act or condition.
- Company tool pushers suggested that the casing could be landed closer to the rig floor to prevent the need to be hoisted to higher levels. This would allow the hoisted employee to stay within a safe visual working area.
- The practice of using extension chains during personnel hoisting was banned on all rigs. This would keep the swivel connection at a safe visual distance should it become hung up within the mast.
- Company HSE personnel suggested using a tag line attached to the hoisted employee, which could be used to help maneuver the hoisted employee up through the mast.
- Maintenance personnel suggested that roll pipe should be installed on exposed edges throughout the mast to eliminate areas where hoisting equipment could become snagged.

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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