

Safety Alert From the International Association of Drilling Contractors

ALERT 07 – 13

DROPPED CRANE BLOCK HOOK LATCH

WHAT HAPPENED:

The deck crew was changing out cutting skips. A full skip had just been landed and unhooked from the whip line of the starboard crane. As the crane was booming into position for the next lift, the J-latch (Fig.1) from the main block's hook fell approximately 40 meters and landed on top of the cuttings skid, then bounced between two employees and came to rest on the main deck. No injuries or other damage occurred. The incident was designated "High Potential" for severe injury.



WHAT CAUSED IT:

The main block hook J-latch came in contact with the crane boom. The boom saver (protector) pad was not in the correct position on the boom to prevent metal-to-metal contact between main block and the boom (see Fig 2).



Fig. 2 showing the approximate point of impact on the boom by the block and the incorrect position of the boom saver pad.

(This diagram is not to scale and does not reflect the position of the whip line or boom during the incident and is used only to illustrate the impact between the main block and boom).

The impact dislodged the circ-clips which allowed the pin to be knocked out of place which allowed the latch to fall (see Fig. 3 below).



Fig. 3: The pin that was displaced after the circ-clips were dislodged when the block struck the boom.

Circ-clip installs in the grooves at each end of the pin that retains the hook latch.

It has been ascertained that the circ- clip and pin system used to retain the hook latch is designed for easy disassembly for equipment inspection and <u>should not be</u> <u>altered</u>.

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.



Safety Alert From the International Association of Drilling Contractors

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

- Crane Operators during pre-tour inspections are to ensure the following:
 - The anti-two block is correctly positioned so the block cannot be stopped above the boom saver.
 - The J-latch system is intact—circ-clips are securely in place on the pin.
 - The boom saver pad is in good condition and positioned to prevent metal-to-metal contact (see Fig. 4 below).



Fig. 4: The boom saver pad that did not prevent main block from contacting the boom.

- **Maintenance personnel** are to ensure the J-latch system is placed on preventive maintenance plan for annual change-out of renewable / replaceable parts (pin and circ-clips; and main latch if required). Have complete spare latch assembly on hand.
- **Roustabouts and Crane Operators** are to ensure the J-latch lock is secured before all lifts and before stowing the block. This must be captured in rig procedures, JSA's, etc. and communicated to all crews
- **Crane operator** is to conduct an immediate post-impact inspection if <u>the block is seen to contact the</u> <u>boom or other object.</u> Verify pin is in place with circ-clips intact.
- **Operations managers** are to notify the inspection company of this incident and ensure <u>that the location /</u> <u>position and condition</u> of the boom saver pad is included in future inspections.
- **Crane operator** is to operate crane in such a way to prevent excessive swinging of the main block.
- **Maintenance personnel** are to consider changing boom saver pad to wrapped nylon line, as it may be more effective and lighter.

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.