

ALERT 14 – 11

LACK OF COMMUNICATION RESULTS IN FATALITY

WHAT HAPPENED:

A Mechanic suffered a fatal injury while repairing the iron roughneck (integral to the Pipe Handling Machine – [PHM]) on the rig floor.

The operation at the time was breaking out and laying down the BOP test assembly when a hydraulic hose burst on the iron roughneck. A decision was made to continue laying out the pipe using manual tongs with the PHM upper and lower racking arms. The Mechanic was notified and he came to the Drill Floor via the unrestricted (“green”) access stairway.

The Mechanic identified the burst hose and told the Driller he would check if there was a spare. The Driller told the Mechanic that the crew would continue to lay down tubulars and would be using the PHM.

The Mechanic left the Drill Floor and returned via the restricted access port-side stairway and walked to the rear of the PHM. Signage on the port stairway and on the access gate behind the PHM requires that the Driller be notified prior to entering the rig floor or the area behind the iron roughneck. No one saw the Mechanic arrive on the rig floor and he did not announce his arrival.

The iron roughneck was in “single” mode and in this position the iron roughneck inner carriage is extended out of the carriage’s frame resulting in a 16 inch (41cm) gap between the iron roughneck and the rear access cover. The Mechanic climbed over the rear bumper bars on the PHM and entered into the 16 inch (41cm) gap between the iron roughneck inner carriage and the rear access cover.

The Assistant Driller functioned the PHM to “normal” mode (which causes the iron roughneck inner carriage to retract back into the assembly frame) and then functioned the PHM to rotate to the aft set-back area to pick up a stand of pipe.

The Assistant Driller looked in the direction of the PHM/iron roughneck and noticed red coveralls at the back of the iron roughneck and immediately stopped the PHM. At the same time the drill crew shouted that someone was trapped inside the iron roughneck. The Driller came out of his cabin and realized the Mechanic had been trapped in the iron roughneck. His injuries were fatal.



Iron Roughneck, Inner Carriage Extended

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.

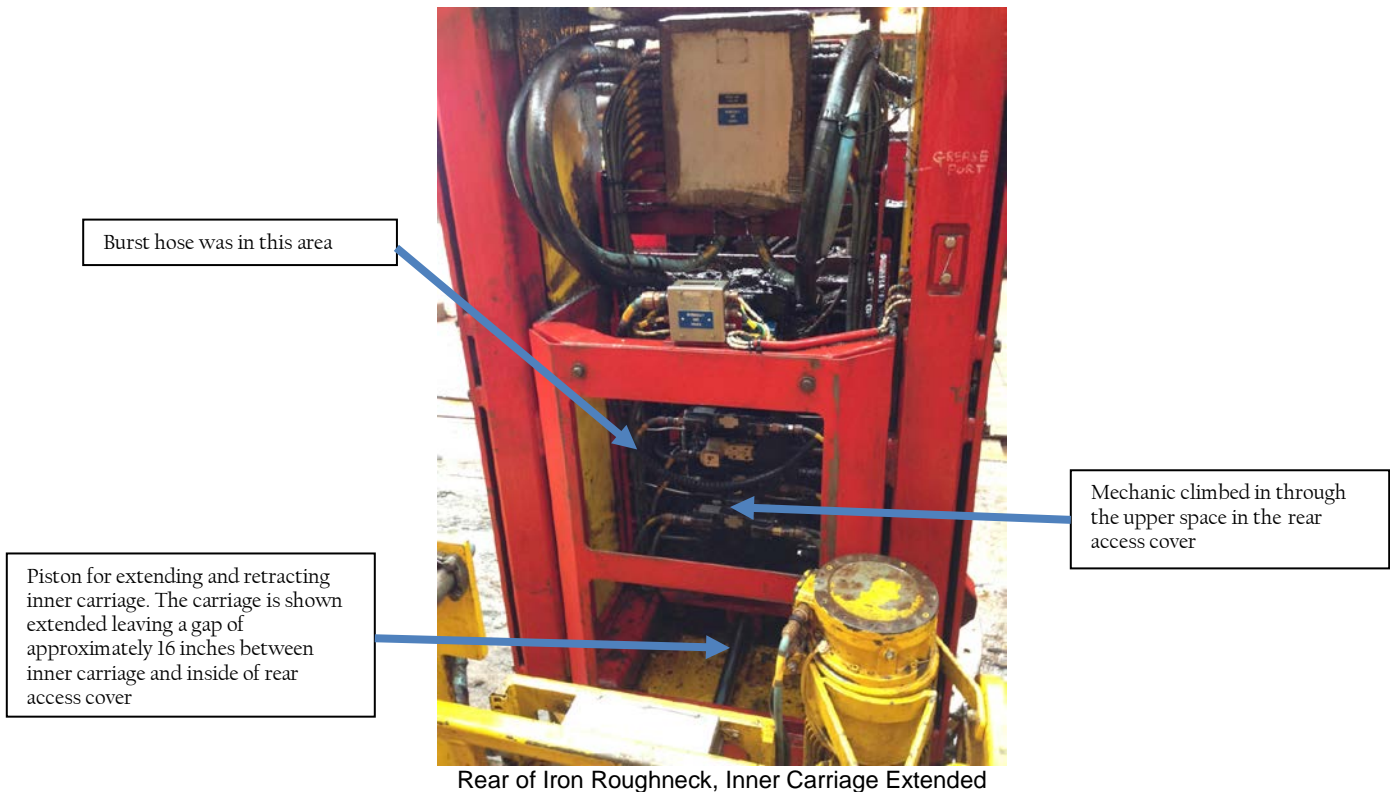
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Safety Alert

From the International Association of Drilling Contractors



WHAT CAUSED IT:

- Inadequate Communication - Mechanic returned to the worksite via a restricted access and commenced intrusive work on the iron roughneck without notifying the Driller or the drill crew, even though he had been informed that the PHM was required for operations.
- Routine non-compliance with Energy Isolation Requirements – rig floor hydraulic equipment was worked on routinely without effective isolation

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

- Enhanced Control-of-Work Process
- Reinforced restricted access, all personnel must pass through the Drillers Cabin before accessing Rig Floor
- Reviewed all Rig Specific Procedures for operation of remotely operated equipment
- Placed signage stating “This Equipment May Be Remotely Operated”
 - Installed expanded metal screen on iron roughneck rear and side access points
 - Installed a retractable barrier to restrict access between iron roughneck and existing handrails
- Clearly communicated that compliance with requirements exceeds all “operational pressures”
- Liaised with Equipment Manufacturer regarding installation of guards

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