



# Safety Alert

From the International Association of Drilling Contractors

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ALERT 04 – 06

## REPAIR WORK RESULTS IN EYE INJURY

### WHAT HAPPENED:

A hydraulic hose failed on an Iron Roughneck assembly. In order for the Maintenance team to identify the location of the failure, the hydraulics was reinstated and the PHM Iron Roughneck functioned. The person who was subsequently injured was standing approx 12 feet away and was in the process of removing a compactor bag of protectors from the Drill Floor when a jet of hydraulic oil struck him. The injured person was wearing safety glasses at the time however some hydraulic oil found it's way into his left eye. The injured person's eye was flushed with eyewash both on the rig floor and at the Medic's office. He was then transported to an eye clinic for further assessment where it was found that he was unfit to return to work.

### WHAT CAUSED IT:

- During the initial hose failure the fluid was contained within the PHM Iron Roughneck assembly. There was a failure to recognize that by moving the PHM clear of well center and reinstating the hydraulics it was possible to open up a leak path for the oil clear of the assembly.
- Risk Assessment and its associated hazards were not considered as part of the operation. As a result no barriers were erected and simultaneous operations were allowed to take place on the drill floor.

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

- Instructed rig personnel to prepare a detailed procedure for hydraulic hose replacement on the PHM. Include the need for a suitable and sufficient risk assessment.
- Rig personnel need to recognize the need to assess the risk to other ongoing operations in your area. A change of direction may result in the introduction of another Work party resulting in unplanned simultaneous operations.
- A 'rubber skirt' has been attached to both sides of the PHM Iron Roughneck to act as a guard against potential leak paths.
- Instructed rig personnel that that **anybody** can STOP a task if they believe it to be unsafe or not progressing as per Tool Box Talk/company procedures.

### Messages:

- The potential for the oil to find a leak path was not considered by experienced crewmembers and as such simultaneous operations were permitted on the Rig Floor. Making assumptions is very dangerous and normally only come to light with hindsight – at which point it's too late.
- Although a Tool Box Talk was held to cover the repair of the PHM there was a failure to recognize that other personnel, working in close proximity of the faultfinding, could have been impacted by the reinstating of the hydraulics and functioning the PHM.



Person in left of picture positioned beside source of leak. Person on right of picture is assuming position of injured person.



Picture showing rubber mats attached to PHM carriage, to assist in containing hydraulic leaks within carriage assembly.

**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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