



Safety Alert

From the International Association of Drilling Contractors

ALERT 12 – 03

MALFUNCTIONING PUMP RESULTS IN 3RD DEGREE BURN INJURY

WHAT HAPPENED:

While disconnecting the suction line from a drilling fluid transfer pump, an employee sustained 3rd degree burns when his lower abdomen and right arm were splashed with hot drilling fluid. The employee was in the process of transferring the hot drilling fluid from the haul-off pit to the reserve pit. The transfer pump had been running for an unknown amount of time before the employee discovered the suction line was clogged. The crew had experienced similar problems with the pump system in the past and was unsuccessful in their attempts to keep the suction line from clogging up. The employee turned the pump off and, with the assistance of the derrickman who was lifting the suction line from the haul-off pit with a forklift, the employee attempted to disconnect the suction line from the pump. Once the cam-lock connector on the pump was released, the built up pressure in the suction line blew the hose off the pump, splashing the employee with the hot drilling fluid.

WHAT CAUSED IT:

- Once the suction line became clogged, the pump continued to run causing the system to operate at an unsafe temperature, building pressure between the end of the suction line and the pump.
- The crew had experienced problem with the system from the time it was delivered on location and was not able to keep the suction line from clogging up. The pump was not operating at its expected potential.
- The injured employee did not release the pressure utilizing the pressure bleed-off valve prior to disconnecting the suction from the pump.

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

- Instructed rig personnel to immediately report all malfunctioning third party equipment to the appropriate personnel so proper maintenance can be performed.
- Instructed rig personnel to utilize the bleed-off valve to release potential stored pressure prior to disconnecting all hose lines.
- Instructed rig personnel that a pressure gauge should be installed on the pump to indicate when the system is under pressure.
- Informed rig personnel that they should ask for instructions on the safe operating procedure of any company owned or 3rd party equipment.

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.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices
Copyright © 2008 International Association of Drilling Contractors All rights reserved.

Issued January 2012