



# Safety Alert

From the International Association of Drilling Contractors

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**ALERT 04 – 31**

## **EQUIPMENT FAILURE – LOW PRESSURE VALVE USED TO FILL CASING FAILS**

### **WHAT HAPPENED:**

The rig crew was in the process of running casing in the hole. A mud line with a low-pressure valve was being used to fill the casing. At one point while filling the casing with mud, the floorman closed the fill line valve when the casing was full. When the valve was closed, pressure built up and the pressure surpassed the working pressure of the valve. The floorman was struck with debris and required medical attention resulting in a lost time incident.

### **WHAT CAUSED IT:**

The rig's high-pressure mud pump was being used to fill the casing. The fill line components did not meet the pressure rating of the mud pump.

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

- The casing fill up piping system was changed so that it could only be used with a centrifugal pump in the mud system.
- A proper ball type valve with a 90-degree filling extension was installed to fill casing.
- Instructed operations personnel that the main mud pumps are not to be used to fill casing unless in an emergency situation. Usage of the top drive system eliminates this problem.

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**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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