



Safety Alert

From the International Association of Drilling Contractors

ALERT 04 – 01

DRIVE PIPE HAMMERING INCIDENT

WHAT HAPPENED:

While driving 30" drive pipe, a hard area in the formation was contacted. The crew continued to hammer trying to get past the area. When the drive pipe broke through the formation it fell from the hammer approximately 10-15 feet before contacting the elevators. Upon contact with the horseshoe elevators the lift nubbin (driving swage) collapsed and was ejected from the joint, striking the Iron Roughneck and Driller's shack, coming to rest on the rig floor. The joint of drive pipe continued past the elevator and stopped 25½ feet below the rotary. No injuries were associated with this incident but the potential for serious or fatal injury was HIGH! Rig crews had covered a JSA and had a pre-job meeting, which in part was the reason for no injuries to personnel.

WHAT CAUSED IT:

1. Drive pipe came in contact with a hard area in the formation
2. Decision was made to try and hammer past the area and work continued as normal
3. The integrity of the formation changed in such a way, that while hammering, the drive pipe broke through the hard area and continued to fall with little resistance
4. The weight of the string and the distance the pipe fell could not be countered by slacking off the top drive, and pipe could not be captured by the elevators

CORRECTIVE ACTIONS: To address this incident, this company issued the following directives to rig supervisors:

Directives

1. Discuss this incident with all crews. Personnel should be made aware of this type of incident while working with drive pipe.
2. Talk with personnel before any job and make sure that they understand to always expect the unexpected, react in a safe manner, and always have a plan of escape before any job should the need arise.
3. If this type of incident were to happen on your rig:
 - Complete a post jarring inspection
 - Contact the company technical support services about possible shock load damage to derrick and drill line.

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.