SAFETY ALERT - #03-2008
TOP DRIVE GRABBER DIES FALL AND STRIKE FLOORHAND
RELEASE DATE: JANUARY 2, 2008

Function: Tripping in hole with Top-Drive | Incident Date: November 24, 2007
Location: Onshore | Location Detail: Rig floor
Incident Type: Injury | Country and Region: Canada, SE Saskatchewan

Description of Incident:
During a tripping operation, a floorhand operating the pipe spinner received a blow on his wrist from a top-drive grabber die, which fell from a height of 28 metres. A second die came down and just missed driller. A top drive daily inspection and service had been completed. Engineering calculation tells us: dies weighs about 0.48 kilograms. From this height the dies would have been travelling at a velocity of about 83 kilometre per hour with a kinetic energy of 133 joules. Hardhats are tested to a 55-joule impact. A head or shoulder impact would be devastating.

What Caused It:
The die retainer plate was bent over allowing the dies to eventually fall out. Three scenarios could cause a die to be pulled from the grabber block die holder:
1. While mouse holing pipe, pipe is broken from top-drive while still in suspension. This causes all weight of joint to be held by grabber.
2. While table breaking top-drive is removed from tool joint, with grabber engaged.
3. While back reaming, stand is pulled and connection is broken at monkey board level, by the Driller.

Note: A safety is in place so hoisting clutch is disengaged when grabber is engaged, but the driller can override for sliding purposes. Override use could result in improper operation.

Corrective Actions:
- Circulate and discuss alert with all appropriate personnel
- Training/observation/coaching of crews on watching for improper top-drive operation. Audit and improve the top-drive hand’s inspection process.
- Floorhands will periodically check dies through view ports after connections
- Discussions with various top drive personnel indicated that dropped dies are not unheard of – implies need for improved reporting of near misses/near hits.

DISCLAIMER:
This Safety Alert is designed to prevent similar incidents by communicating the information at the earliest possible opportunity. Accordingly, the information may change over time. It may be necessary to obtain updates from the source before relying upon the accuracy of the information contained herein. This material is presented for information purposes only. Managers and supervisors should evaluate this information to determine if it can be applied to their own situations and practices.