

SAFETY ALERT

UNCONTROLLED FALL OF DRILL HEAD



Saver sub impacted into rod



Mast with drill head and chains where they have come to rest

DATE: 12-11-2009 **SITE:** Tindals Leases **RISK RANK:** High
TOPIC

A Potentially Significant Incident occurred on M15/646 (Tindals Lease) at 1030 on the 7th of November 2009.

A Rotomec 11 RC rig and drill crew was lowering a string back into a hole, after pulling out to inspect the hammer.

The drill head was decoupled from the rod string and raised up the mast by the driller, while the offsider worked at the side of the rig, preparing to run a fresh rod into position.

Without prior indication, the drill head assembly with attached hoses and chains fell uncontrollably down the mast, impacting with the drill table, causing damage to the saver sub and the end of the rod string.

The driller heard the pull back chains fail and leapt clear of the area. The offsider was at that time in a safe location at the side of the rig.

This incident had significant potential to cause severe injury to both members of the drill crew, depending on what tasks they may have been engaged in had the drill head fallen at a different time. The drill head on this rig, with all attached hoses and equipment, has a total weight in the order of 1000kg. A significant amount of energy was generated by the falling drill head.

Mechanical engineering inspection found that the chain adjuster on the drill head was worn and had pulled out of the thread. This item is internal and unable to be inspected during routine external inspections.

A requirement has been put in place with the drilling provider that the chain adjusters be removed at six monthly intervals and crack tested, as well as an increased frequency of checking, adjusting and tensioning chains.

All RC rigs featuring a similar chain to drill head attachment should be inspected for similar internal wear and fatigue, and replaced as required.

NEVER TAKE FOR GRANTED THE WEAR STATE OF INTERNAL FASTENINGS, PARTICULARLY WHEN THEY ARE RESTRAINING OR CONTROLLING SIGNIFICANT AMOUNTS OF ENERGY.