MAN-RIDING OPERATION RESULTS IN A FATALITY

WHAT HAPPENED:
The Rig night shift drilling crews were preparing the rig to commence drilling operations following a rig move. Part of this task is to set back the mast lifting line equalizing yoke. This requires working at a height of 35 meters (115 feet) above the rig floor. It was planned to be done with one man in the mast itself and one man on a man-riding winch, both assisting in tying the yoke back. During this operation the cable supporting the victim fell off the snatch block hung underneath the crown assembly allowing the victim and the supporting cable to fall 35m (115 feet) to the rig floor. The victim suffered multiple injuries and died on the spot.

WHAT CAUSED IT:
- The retaining bolt securing the cheek plate on the snatch block backed out. The safety pin had not been installed. The block had been subject to many activities during the preceding 8 hours which may have contributed to the backing out of the bolt.
- The deformed cheek plate had been subject to a load much greater than man-riding alone. A stall pull with the winch would be powerful enough to deform this plate. The rig had pulled out master-bushings preceding this incident.
- No secondary device in the form of a wire sling below the snatch block to catch the cable in the event of a catastrophic failure was installed at the snatch block in the derrick.
- The utility winch instead of the man-riding winch was used to lift the victim.
- A climbing belt was used instead of a man-riding harness. No secondary fall device was used on this belt.
- No hazard awareness or control. The Permit-To-Work system was disregarded. No meaningful Tool Box Talk was held or Job instructions were given.

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

- Ensure a secondary retention device is fitted on all crown block sheaves.
- Review the Permit To Work system. Is it really being used or a paper exercise?
- Rigging up safety critical equipment is a Permit To Work activity, at least check that a second pair of eyes looks at all critical equipment.
- Be aware of the maximum pull your rig floor tugger can exert on the sheaves and shackles. Remember it is a pulley system, the pull is doubled.
- Assume the manufactures stall out pull unless you know its actual pull.
- Use the correct man-riding winch and an approved man-riding (not climbing) harness that includes secondary fall device.
- Have a proper Tool Box Talk.
- Ask: Is man-riding the only way to complete this task safely, is it the safest way?
Safety Alert
From the International Association of Drilling Contractors

IADC Note: Refer to IADC HSE Reference Guide Section 19, and Safety Alerts: 00-36, 01-02, 01-16, 02-23, 02-32, 02-54, 03-18, 03-37, 05-01