ALERT 01-09

DERRICK FALL PROTECTION TIE-OFF
ANCHOR FAILURE

WHAT HAPPENED:

When working in the derrick, a Derrickman used a “wrap around/tie-off adapter” for his fall protection anchor point. The adapter was about 2' long and made of 3” nylon webbing. The particular one involved in the near miss had a “loop” (like a regular sling) on one end, and a “metal D-ring” on the other. The tie-off adapter is wrapped around a secure structure (pipe, etc)... the D-ring end is then slipped through the loop end. The user’s lanyard is then attached to the metal D-ring. The derrick man had tied off and was leaning out from his platform when the tie-off adaptor “broke”. He caught himself on the pipe and did not fall.

WHAT CAUSED IT:

Inspection revealed that the “D-ring end” of the sling had not been fully assembled. The webbing material had been folded around the D-ring and “hot-glued together” but it had not been stitched as required. Follow-up equipment inspections revealed that 4 out of 5 tie-off adapters that the company had purchased were defective. The manufacturer has issued safety alerts to all their customers and is not aware of other defective equipment. The manufacturer determined that the defective tie-off adapters missed two critical stations on their assembly line: 1. Stitching and 2. Inspection. There were many other opportunities to detect the defective equipment that were missed.

CORRECTIVE ACTIONS:

- Fall protection, like all PPE, requires “visual inspection by the user prior to use”.
- Workers should receive training (periodic retraining) on PPE Inspection.
- Rig based materials person or supervisor should inspect PPE when it is received at the rig and before issuing it for use.
- Review the Operating Instructions, inspect the equipment closely feel of it to make sure there are no obvious defects. The extra minute or two you spend looking at the equipment may protect you or a co-worker from serious injury.

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.