

Failure of 4" Hammer Union Under Pressure

INCIDENT

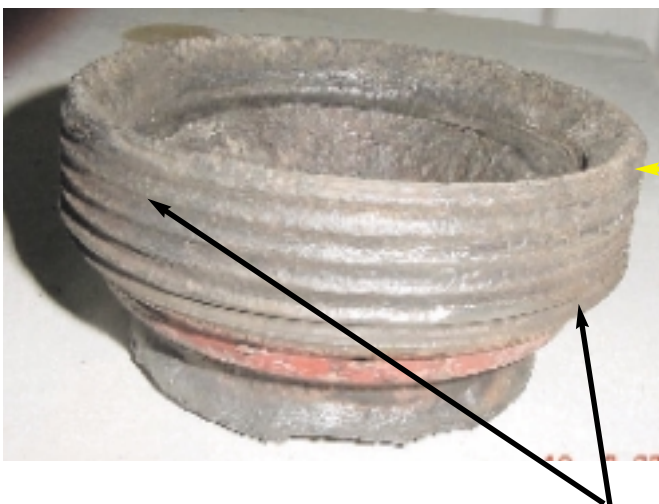
The drill string was being pressurised to 21,000 kPa to set the packstock. In the process, a 4" 10K Hammer Union (Make -Kemper,USA) located on the standpipe manifold suddenly came open at 21,000 kPa., splashing water with high pressure. No body was injured as the operation was carried out under Permit to Work.

FAILURE:

- **Failure of Equipment** / the Hammer Union failed under pressure due to worn out threads
- **Inadequate Procedure** / the checklist for Lowering and Raising Mast did not address the requirement of inspection and maintenance of the standpipe hammer unions.
- **Inadequate policy on pressure testing** / the pre-spud test of the standpipe did not over working pressure of the standpipe.
- **Lack of due care by rig floor supervisors** / the union was cracked loose during the move to facilitate lowering of mast and kept loose during the move.

LATERAL LEARNING:

- Carry out pre-spud pressure test to working pressure of equipment.
- Regular maintenance/inspection of the standpipe hammer unions.



Worn threads on hammer union that were not checked

