Safety Alert

From the International Association of Drilling Contractors

ALERT 06 – 35

RELEASE OF PRESSURE RESULTS IN LACERATION AND SUTURES

WHAT HAPPENED:

While pressure testing the Choke Manifold up to 15,000psi the Assistant Driller noticed a leak at the test hose at approximately 9,000psi and asked the Motorman to repair the leak. First the Assistant Driller opened the bleed valve at the test pump and then he went directly to the Choke Manifold so that he could bleed off the volume in the line to the trip tank. While the Assistant Driller was still opening the valve the Motorman disconnected the quick release couplings at the choke causing the escape water pressure to lacerate the left palm at the base of the thumb. The laceration required four sutures.

WHAT CAUSED IT:

- A previous leak had been observed during a test at 15000psi 10 minutes prior to this incident. On that occasion the Motorman took approximately 10 minutes to report to the work site allowing sufficient time for the whole system to bleed off and the repairs completed without incident.
- Both the Assistant Driller and the Motorman were experienced and had conducted tests and/or maintained or repaired the lines and associated equipment on many occasions.
- The double skinned ½ inch HP line from the Test Pump to the Choke Manifold was rated to 20,000psi working pressure. The actual diameter for pressure release was approximately ¼ inch.
- There was no communications between the Assistant Driller and the Motorman when to disconnect the HP line.
- A permit to work was in place.
- There was no written procedure, JSA or equivalent for this task.
- A pre-job meeting was conducted prior to pressure testing.
- There was no additional job meeting or step back conducted when the conditions of the job changed i.e. the need to bleed off pressure because of the leak observed.

CORRECTIVE ACTIONS: The following learning's/corrective actions have been identified:

- **Lack of Supervision.** All Supervisors as part of their position are obligated to ensure that those working under their supervision are fully aware of their responsibilities in the task at hand
- **Planning.** Planning isn't just about the start to the end. It includes what might, could or can happen between those two points. When there is a change during a job or process we need to reassess our planning to ensure the change is controlled and any new steps or hazards are identified.
- **Complacency.** This job has been performed on many occasions without injury. In this case the pressure had not been fully released. Evidence that the pressure system has been fully depressurized must be checked i.e. ALL pressure gauges are to indicate zero with zero fluid release before dismantling or starting any work pressure equipment.
- **Lack of Policy and Procedures**. No documented procedures. Rig to develop a procedure and/or JSA on Working with Pressure and associated hazards. Standards to be agreed on the requirements during pressure testing i.e. barrier tape, signage.
- **Education.** Rig Managers are to educate all personnel on the need to step back for all jobs and any change to the job.

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.

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