

Safety Alert

From the International Association of Drilling Contractors

ALERT 10 - 07

TANK WELDING – HIGH POTENTIAL INCIDENT

WHAT HAPPENED:

The rig accumulator supply tank required maintenance which included the task of welding on the tank and piping. The rig site senior mechanic was walking within the vicinity of the job being performed and noticed the welder welding on the tank. The operation was immediately stopped by the mechanic when he realized the potential explosive atmosphere that existed. The tank itself had not been purged. The tank lid was still closed and secured in place. The contents of the tank had not been emptied nor cleaned prior to the welding taking place. The welder was not aware of the tank contents. There was not a well defined fire watch being utilized. A fire extinguisher or pressurized water hose was not within the working vicinity as required by policy and the Permit to Work procedure. Although a PTW document had been issued, the appropriate personnel were not involved. The document had been incorrectly filled out and many details were not followed as required, including the pre-job safety check off list. The designated fire watch for this maintenance work to be performed had become involved in other duties at the Rig-Site office. A replacement fire watch had not been confirmed either.

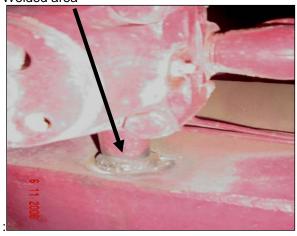
WHAT CAUSED IT:

- Lack of pre-job planning and hazard assessment (JSA) not implemented or carried out.
- Personnel directly involved in the task failed to recognize the hazard potential.
- Inadequate safety leadership and poor job planning by rig site management.
- Incorrect implementation of the Permit to Work (PTW) system. All aspects of this document had not been followed or utilized.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

- Training for all rig site personnel on the understanding and utilization of the PTW system.
- Training for employees directly involved in future and potential fire-watch duties.
- Verifying the qualifications of all on-site rig welders and their understanding of maintenance and work
 procedures involving pressure vessels and flammable liquids or gases and the potential for explosion.
- Pre-job check by the Senior Rig Site Manager prior to and following the signing of the Permit to Work System.
- Senior rig site personnel to communicate the responsibilities of employees to perform duties such as firewatch or confined-space entry monitoring and compliance.

Welded area



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.