



# Safety Alert

From the International Association of Drilling Contractors

## ALERT 10 – 10

### WELDING OPERATION RESULTS IN A FIRE

#### WHAT HAPPENED:

The rig was in the shipyard for upgrades and repair. At the time of the fire, the shipyard crew was preparing leg #3 chord-B for the installation of an additional section of leg. The shipyard crew was working inside a welding tent that was made of light-weight tarps. The workers were grinding the mating surface of the leg when sparks created by the grinder ignited the tent surrounding the leg. The shipyard fire watchman attempted to extinguish the fire using the dry powder fire extinguisher while the fire fighting team connected the main deck fire hose to the manifold and sent it up to him. Once the fire watchman had the hose, the Crane Operator (Fire Team Leader) opened the fire hydrant valve on the main deck. He found that there was no water pressure at the hydrant so he went down to the Rig Engineer's area and manually opened the fresh water pump valve linking it to the fire manifold on the main deck. With water to the hose, the fire was successfully extinguished.



#### WHAT CAUSED IT:

- The JSA obtained for the task was generic for “general welding and cutting” (generic JSA). A JSA for gouging at leg #3 chord-B was not completed, therefore the hazard of gouging with a light-weight tarp tent was not recognized.
- Safety-critical equipment was not connected/online. The fire pump could not automatically kick in because the fire pump circuit breaker was being used for the fresh water pump on the jetty.
- Supervisory personnel onboard the rig didn’t understand their roles and responsibilities for “Control of Work”. The gouging activity was not reviewed prior to the task commencing. The risks of using a non-fire retardant tent were not recognized and properly controlled.
- Recovery measures were inadequate (fire hydrant not ready for automatic service).



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

- Generic JSA's are an aid only and should not be relied upon for all tasks. Each task must have its own job-specific JSA.
- Safety-critical equipment should not be disabled without a Permit To Work (PTW) approved by the Senior Toolpusher.

**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.**

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices

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