

Safety Alert

From the International Association of Drilling Contractors

ALERT 98-33

Fatality – Contract Welder

WHAT HAPPENED:

A contactor welder was fatally injured while welding the swedge on the drive pipe in preparation to nipple up the diverter assembly. At the time of the accident, two welders were welding at the level of the rig's drive pipe support deck. The Texas deck had been lowered to a position slightly above the level of the drive pipe support deck prior to commencement of welding operations. The forward drip pan had been removed to improve the welder's access to the joint being welded.

Concurrent with the welding operation, other rig crewmembers were preparing the diverter stack assembly for installation on the swedge. As the diverter was lifted from the stored position on the stub, the diverter spun in a counter-clockwise direction and the outlet valve assembly on the diverter stack struck the Texas deck air tugger. The blow caused the double drum on the air tugger to move forward, disengaging the drum from the gears and brake. This resulted in the drum freewheeling and lowering one side of the Texas deck. The Texas deck frame struck the drive pipe support deck and tilted until there was sufficient angle for the Texas deck to slide downward, striking one welder in the mid-back and pinning him on the drive pipe support deck. The other welder was not injured.

CORRECTIVE ACTIONS:

- 1. Procedures may be revised to prevent torque in the lifting system, which results in uncontrollable spinning of the stack when lifted.
- 2. The stack should not be lifted until welding operations are complete and personnel are clear of the drive pipe guide deck area.
- 3. Back-up safety chains should be installed on each corner of the Texas deck to prevent movement in the event of winch failure.
- 4. The diverter lifting and trolley system may be redesigned to incorporate a swivel assembly to prevent undesired binding and torque in the chain hoist used for lifting the diverter stack.
- 5. Texas deck winches should be moved as far from the diverter stack storage position as possible.
- 6. Texas deck winches should be adequately guarded to prevent damage id struck by the diverter assembly during lifting/repositioning of the stack.

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.