

Safety Alert From the International Association of Drilling Contractors

ALERT 12 – 32

INATTENTIVENESS RESULTS IN INJURED EMPLOYEES

WHAT HAPPENED:

The crew was laying down drill pipe with 42 joints left in the hole when they experienced a tight connection. The iron roughneck wasn't breaking the connection as it should, so the crew began using manual tongs to break the pipe connection and spin the pipe out with the rotary table. With both tongs on the joint of pipe, the driller engaged the breakout tong to break the connection. The driller mistakenly thought the connection had broken when the tongs had slipped off of the joint. The driller engaged the rotary table which caused the breakout tong to swing all the way around striking the makeup tong. The makeup tong then struck an employee, forcing him into the drawworks, resulting in an injury. A second employee was injured when he fell over the rotary chain guard in an attempt to avoid the swinging tongs. A third employee was nearly struck in the head with the swinging tong; however, he bent over just in time for the tong to swing over the top of his head, knocking off his hard hat.

WHAT CAUSED IT:

- The dyes on the iron roughneck were worn out and would not break the connection. This led the crew to use the manual tongs.
- During the investigation it was found that the clevis, used to connect the snub-line to the break out tong, was not properly equipped. The pin used in the clevis was missing the nut and the keeper that was being used was inadequate. This allowed the pin to be pulled from the clevis during the high torque situation.
- The driller mistakenly thought the connection had broken and activated the rotary table to spin out the joint of pipe.
- The manual tongs were not inspected prior to starting the job.
- Since the manual tongs are not used on a frequent basis, it is easy for the crew to be out of practice and the importance of safety, while using the manual tongs, was not emphasized.

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

- All employees were reminded that a JSA should be created, reviewed and or updated for this particular task. The JSA should include properly inspecting the tongs and any other tools required to do the job.
- All personnel were instructed to conduct a pre-job safety meeting anytime the task deviates from the normal procedure.
- The rig manager reminded all personnel that during these operations the personnel involved should slow down and communicate with one another to ensure the job is done as safely as possible.
- The floor hands were instructed when using the manual tongs, that once the tongs have a good bite on the joint, they should clear the area until the connection is safely broken.
- The crews were reminded when using the manual tongs, that once the connection is broken the joint should be spun out using the iron roughneck, not by the rotary table.
- The crews were instructed to take the time necessary to replace the worn out dyes of the iron roughneck and finish the job accordingly. In this case, the rig manager had an extra set of dyes in his possession. Had the crew taken the time to replace the worn out dyes and continue using the iron roughneck, this incident would have been preventable. The use of the manual tongs should have been a last resort.
- All rigs in the fleet were instructed to conduct an immediate inspection of their manual tongs and document that they are equipped with the proper safety accessories. The safety department will verify this inspection and will assist each rig to comply with this requirement.

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.