

**Safety Alert** From the International Association of Drilling Contractors

### ALERT 12 – 22

# FALLING STEEL PLATE RESULTS IN STRUCK-BY INCIDENT

### WHAT HAPPENED:

The crew was in the process of rigging down their rig. After lowering the draw works section approximately 8 feet (2.4m), the crew began work on removing the driller side walking foot in preparation to lower the derrick. While removing the driller side walking foot, a small (2 feet x 2.5 feet / 61cm x 76cm), steel, floor plate located on the skid at the off-driller side of the draw work fell approximately 12 feet (3.7m) below the drillfloor. The steel plate bounced off the sub-structure and then struck an employee, who was working approximately 6 feet (2m) away from the substructure area. At the time of the incident, the employee was performing other duties and was not involved in the task of removing the walking foot.

## WHAT CAUSED IT:

- The JSA for rigging down the draw works did not include the steps to verify floor plate removal prior to moving/lowering equipment.
- The rig was previously stationed on a multiple well pad for 10 months and it had only been rigged down twice from that pad until the time of incident; therefore:
  - o Only two employees on this crew had multiple experiences with rig up/down for this rig.
  - There was a lack of familiarity in rig up/down procedures with this style of rig by the current crew.
- While rigging down the floor plates, it was noticed that the bridle lines were crossed and the crew immediately began to fix the crossed lines. After the lines were put in the correct position, no one thought to go back to the initial job of removing the floor plates to ensure that the job had been completed.
- The rig personnel stated that they did not realize that the floor plate was separate from the actual floor since there were no lifting eyes or cut outs in place that would make it easily noticed as removable.
  - It was also observed that the plate was made of that same material and painted the same color as the floor.
- The ground area below the workers was not sufficiently cleared while the lay down operations were being conducted.
  - Even though the employee on the ground was working some distance away from the substructure, he was still in the line of falling objects.

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

- The company revised the rig specific JSA to include the removal of all floor plates and verification of removal prior to lowering the draw works section.
- Extra JSAs and supervision were provided for rigging up/down. This is especially important after the rig operates for several months without rigging down or if there is a high turnover of employees.
- Rig personnel were reminded that whenever work is stopped due to a change in the planned work, they must review the JSA steps prior to resuming the intended task.
- Rig personnel were directed to install pivot links on all removable floor plates to both assist in their identification and serve as lifting points for rigging up or down. If appropriate for visibility, additional color will be added to make these points more recognizable.
- Rig personnel were reminded that the JSA shall include steps for determining sufficient safe distance from the substructure for personnel to work while floor and overhead rigging up/down is being performed.

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.