FAILUR TO TORQUE LIFT SUB RESULTS IN DROPPED MONEL DRILL COLLAR

WHAT HAPPENED:
During tripping operations, the crew was in the process of making up the bottom-hole assembly. The monel drill collar was brought up to the rig floor by the pipe-cat. A lifting sub was placed into the box end of the monel drill collar and screwed together with chain tongs. The drill collar was then picked up with the top drive elevators and pushed out of the way so a stabilizer could be picked up and placed in the mouse hole. The monel drill collar was then placed into the stabilizer, made up and torqued with the iron roughneck. The bottom hole assembly (BHA) was picked up out of the mouse hole with the top drive and pushed out of the way so a float sub could be brought to the rig floor. The float sub was then stood up and placed in the jaws of the iron roughneck and the monel/stabilizer assembly was stabbed into it. Chain tongs were used to make up these two sections while the iron roughneck was used as back up on the float sub. The iron roughneck was then used to make up the float sub to the stabilizer.

At some point while the crew was making up the float sub to the stabilizer, the lift sub unscrewed from the monel. When the iron roughneck was removed, the BHA, which was sitting on the rig floor, fell out of the V-door and land on the pipe-cat.

WHAT CAUSED IT:
- The lifting sub that was placed into the monel drill collar was made up with chain tongs without being torqued before being lifted with the top drive. No one stopped the job to insure the connections were properly torqued.
- No one was watching the lifting sub to insure it was not coming unscrewed while the connection was being made between the float sub and the stabilizer. The iron roughneck was spinning the connection together at the bottom which allowed the lifting sub to twist out in the opposite direction at the top/overhead.
- There was no direct supervision watching over the operation to insure the task was completed “per standard procedure”, torquing the connections.

CORRECTIVE ACTIONS: To address this incident, this company did the following:
- All equipment being lifted overhead with a lifting sub, lifting eye, etc., should be properly torqued to the manufacturer’s recommendation before being raised to the vertical position. All personnel must utilize the stop work authority, never take short cuts, and complete the task as required.
- The idea of drawing a chalk line on the lifting sub to the collar was discussed and to designate someone to visually watch the lifting sub to insure it does not back out of the connection.
- Moving forward and for future operations it will now be required that the operator’s well site supervisor, directional driller or MWD employee must be present on the rig floor in addition to the tool pusher while working the BHA.
- Utilize the stop work authority to stop the job until all required personnel are present.

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.