



Safety Alert

From the International Association of Drilling Contractors

ALERT 07 – 10

TWO AUXILIARY BRAKE INCIDENTS RESULT FROM MISCOMMUNICATION

WHAT HAPPENED:

In the past month our company has experienced several serious incidents that could be described as a “Driller’s worst nightmare.”

1. Driller miscommunicated with his floorhand who, instead of lining up the proper valves to fill the trip tank, disengaged the dynamatic brake handle. This caused the brakes to get hot, and the driller, unable to stop the downward travel of the blocks, ran the top drive into the rail stops.
2. Driller turns hydromatic water control valve in the wrong direction, choking off the water supply to the hydromatic causing the brakes to overheat. He was unable to stop the descent of the blocks so the drill string and the elevators struck the rotary table, bending the joint of pipe in the elevators.

No injuries resulted from these incidents and each could have been far worse.

WHAT CAUSED IT:

This is largely a communication problem.

- The crew and supervisors spoke different languages.
- The driller did not recognize which direction increased the flow of water to the hydraulic brake.
- The floorman came from a crew where the hand signals were different.

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

1. To address the communication gap and prevent this kind of problem from occurring on rigs where supervision and crews speak different languages, the company is developing rig-wide standardized hand signals.
2. The bolt and nut securing the Dynamatic brake handle were replaced with a padlock with the key kept in the driller’s control.
3. The brake handle was painted safety yellow to make it more visible.
4. The remedial action plan for the second brake incident included labeling the water control valve to the hydromatic thereby showing the direction of open and close.
5. Rig supervisors were instructed to review with all rig personnel the danger signs signifying overheating of mechanical brakes. When mechanical brakes display signs of overheating, they are likely being misused.

These incidents have stimulated discussions among operations personnel. A memo was sent to the field to solicit comments about these and other issues concerning the drawworks brake systems. It is anticipated that this safety bulletin will further promote that discussion.

Both incidents and remedial action plans should prompt each of us to ask, “How are we managing the brake systems on our rig(s)?” These incidents are likened to a “Driller’s Worst Nightmare” and STOP statistics tell us that the worst is yet to come unless we change our behavior. Changing safety behavior will nullify this slippery slide down the slope to serious injury or a fatality. Rig supervisors are to audit their brake system procedures, reviewing how brakes are used in their operation before their worst nightmare becomes reality!

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.

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