



Safety Alert

From the International Association of Drilling Contractors

ALERT 03 – 33

DROPPED OBJECT – DERRICK LIGHT FIXTURE

WHAT HAPPENED:

A 41-pound (18 kg) explosion proof 400-watt Mercury Vapor light fixture fell 20 feet (6 meters) from the derrick and landed on the rig floor in front of the Drawworks. The electrical cable pulled out of the light leaving the cable energized in the derrick. No injuries were associated with this incident.

WHAT CAUSED IT:

1. The bolts that connected the light fixture to the bracket, vibrated loose.
2. The light was a new type, and when the light was installed into the derrick a risk assessment was not done to identify the potential hazards. Because of this:
 - The safety cable was secured to the bracket, instead of the light fixture.
 - There is no means to secure the safety cable directly to the light fixture.
3. The loose bolts and the improper manner in which the safety cable was secured to the fixture were missed during the weekly derrick inspection.
4. During the weekly derrick inspection the inspector noted the safety cable was present, however a detailed inspection of the light and how the light was secured was not.

CORRECTIVE ACTIONS: To address this incident, this company issued the following directives and action items:

Directives

1. Risk assessments must be done when installing new equipment or same-type equipment in a new location to ensure all potential hazards are identified and safety measures are in place.
2. When performing the weekly derrick inspection the inspectors must carefully exam each item (lights, raceways, sheaves, secondary fall protection blocks, etc) and confirm that the item is properly secured to the bracket, and the bracket to the fixture, and that the safety cable is secured in a manner to prevent the fixture and bracket from falling.
3. Prior to the purchase of new items that are to be installed overhead it should be confirmed that the item is designed so a safety cable may properly be installed to the fixture.

Action items

1. Inspect all overhead equipment that has the potential to fall (lights, sirens, horns, etc) in the derrick, walkways, living quarters, etc., and ensure the safety cable is secured to the fixture and bracket. If the safety cable cannot be secured to the fixture, the equipment should be removed from service. Inspect all safety cables and ensure the cable is secured in a manner to prevent the dropped object from falling closer than 6-1/2 feet (1.95 meters) from the deck.
2. All overhead equipment must have “double nuts” if possible. If unable to “double nut” equipment due to design, than alternative means (jam nuts, lock washers, cotter pins, etc.) must be utilized to prevent nuts from vibrating loose.

Note: See IADC Alerts – 00 – 05, 00 – 18, 00 – 31, 02 – 04, 02 – 07, 02 – 35, 02 – 38, 03 – 06,

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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