



# Safety Alert

From the International Association of Drilling Contractors

ALERT 08 – 39

## DROPPED OBJECT: THERMAL TREE CAP (TEA COSY) FALLS RESULTING IN FATALITY

### WHAT HAPPENED:

The operation was utilizing a rig crane to move a subsea tree from the storage bay to the transport trolley. When the tree was approximately 20 inches (50.8 cm) above the trolley, a crane failure resulted in a non-powered descent of the tree to the trolley. As a result, the unsecured thermal cap was dislodged from its pedestal and fell, fatally striking an employee involved in the task. The thermal cap weighed approximately 980 pounds.

Thermal Tree Cap



### WHAT CAUSED IT:

Further fact finding is currently progressing and not all the contributing factors have been identified. Further communications may be required to highlight any additional contributing factors. The key contributing factors in this event were:

1. The thermal cap was unsecured.
2. While suspended by the crane there was an uncontrolled descent of the subsea tree which resulted in the unsecured thermal cap being dislodged,
3. This uncontrolled descent of the subsea tree occurred due to an over-torque of the crane's motor that operates the main block hoist.

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

**Instructed the Rig Manager and OIM to ensure immediate Corrective Actions to verify:**

- Subsea Tree Handling and Running Operation Activities:
  - Review, with respective operators and their suppliers, the operator's and their supplier's Dropped Object survey accompanying subsea trees planned to be handled or run on company installations.
- If a Dropped Object survey has not been conducted, it must be completed and reviewed by all parties prior to handling or running any subsea tree.

**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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- Ensure all items identified as potential dropped objects are either removed from the subsea tree (preferred method) or secured in a manner approved by the subsea tree supplier's engineering department to prevent and restrain any potential dropped object.
- The Rig Manager is responsible to review and approve the subsea tree supplier's engineered solution prior to implementing the securing method.

**All cranes are inspected to ensure the following:**

- The motor fitted to the main block hoist is consistent with the part number specified by the crane manufacturer manual.
- The motor fitted to the whip line is consistent with the part number specified by the crane manufacturer manual.
- The motor fitted to the boom hoist is consistent with the part number specified by the crane manufacturer manual.
- The findings from the above checks must be communicated to the Rig Manager and recorded in the installation's planned maintenance system.

If additional assistance is needed to complete the required actions contact your respective Business Unit or Division Field Support office.

For all lifts (including client and subcontractor equipment) aboard company installations:

- Ensure all equipment is assessed for dropped object risk as part of the **Job Risk Assessment** plan.
- Ensure all items identified as potential dropped objects are either removed or secured in a manner approved by the Rig Manager.

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