

SAFETY ALERT



Safety Alert No. 439

April 25, 2022

Contact: bseepublicaffairs@bsee.gov

Phone: (800) 200-4853

Toppled Hydraulic Workover Unit Results in Fatality



Hydraulic Workover Unit Before(left) and After (right) Fatal Incident

Recently, a hydraulic workover unit (HWU) toppled while being erected on a caisson located in 35-feet of water in the Gulf of Mexico, resulting in a contractor employee falling into the water. The HWU, consisting of a blowout preventer (BOP) and pipe jack assembly weighing approximately 120,000 lbs., was installed on the wellhead and attached to a 20-inch structural casing. Preliminary observations indicate a break in the casing at the production tree or just below the drive pipe which resulted in the HWU and tree falling over. At the time of the toppling, one contractor employee was elevated on the HWU and tied off with a safety harness for fall protection but fell into the water with part of the HWU.

The exact cause(s) of the incident is under investigation. Because the factors involved in this incident potentially are common to non-rig well interventions in the Gulf of Mexico, BSEE recommends all operators and well-operation contractors review their facilities' fall protection procedures, safe work practices, results of the

latest Level I surveys, and load capacities of wells and platforms before installing equipment.

While this is a preliminary safety alert, BSEE recommends that operators and contractors consider the following:

- Increasing awareness of the dangers inherent in rigging up HWU, or non-rig units, with work environments that make it difficult to tie-off when fall protection is used.
- Reviewing the fall protection design and determining whether quick release of emergency cut-away mechanisms may be used without compromising overall safety or creating new risk.
- Ensuring a reliable means of support exists whenever a HWU, or non-rig unit, is being unhooked from the crane.
- Ensuring your facility and connection points can support the installed equipment and the max pull capacity available during workover operations.
- Reviewing the planning process to ensure a detailed review if unique or unusual operations are contemplated. And if incorporated, including the new processes as part of the agenda for safety meetings and training.
- Ensuring onsite supervision is fully qualified for the planned operations.
- Ensuring the details of all plans are fully communicated and understood.
- Placing special emphasis on the Job Safety Analysis process and shift hand-off meetings to ensure that all personnel and supervisors are involved in the process.
- Considering seasonal weather patterns when installing means of support for HWU or non-rig units.
- If structural damage is found in Level I, II, or III surveys, completing a structural analysis and performing any repairs before connecting equipment such as BOPs, workover, and snubbing, coil tubing units, etc.
- Reviewing Panel Report [2007-045](#) and Safety Alerts [310](#) and [251](#).
- Offering training refreshers for all personnel involved in this type of operation and including this incident as a study case to promote discussion and understanding of the risks.

A **Safety Alert** is a tool used by BSEE to inform the offshore oil and gas industry of the circumstances surrounding a potential safety issue. It also contains recommendations that could assist avoiding potential incidents on the Outer Continental Shelf.

Category: Component Failures, General