



anp
Agência Nacional
do Petróleo,
Gás Natural e Biocombustíveis

Safety Alert 004 - ANP/SSM

Fall of hoisting assembly due to failure of drilling drawworks

The Superintendence of Operational Safety and Environment is issuing this safety alert to notify the petroleum and gas industry and other stakeholders about an incident related to fall of hoisting assembly due to failure of drilling drawworks.

What happened?

During normal operations running BOP (*blowout preventer*) with marine riser on an offshore drilling unit with dynamic positioning, occurred the unrestrained descent of the hoisting assembly (traveling block and top drive). The load came to a complete stop upon the top drive colliding on the drill floor (rotary table), remaining two thirds of the BOP below the mudline. There was no point of rupture in the marine riser string.



Potential consequences

Dropped objects either at sea or at the unit can result in fatalities, environmental or material loss. Additionally, excessive friction due to the drawworks steel cable during an unrestrained descent can start a fire.

Identified causes

- Maintenance management failure;
- Contamination of disc brake with oily substance.

The accident root cause pointed by the operator investigation was the failure of the drilling unit team in NOT following the original equipment manufacturer instructions for tests, inspections and maintenance tasks.

Regulatory Framework

According to item 13.2.1 of ANP Resolution no. 43/2007, the rig operator shall establish plans and procedures for inspection, test and maintenance, in order to seek mechanical integrity of its systems, structures and Operational Safety Critical Equipment and Systems. Such documentation shall comply with manufacturer's recommendations, standards and engineering practices.

Item 13.4 *Monitoring and Results Assessment* requires that unit operator will be responsible for monitoring and assessing inspections and tests results.

The drilling drawworks shall comply with NR-12 (*Segurança no trabalho em máquinas e equipamentos*) requirements.

Lessons learned

- Critical equipment for operational safety shall in accordance with item 2.5.1 of Chapter I of SGSO, established by ANP Resolution no. 43/2007 or supervening.
- The maintenance plan of the drilling unit shall be corrected in order to better reflect the original equipment manufacturer guidelines.

Contact

For additional information regarding this safety alert, please contact ANP's Superintendence of Operational Safety and Environment at incidentes@anp.gov.br.