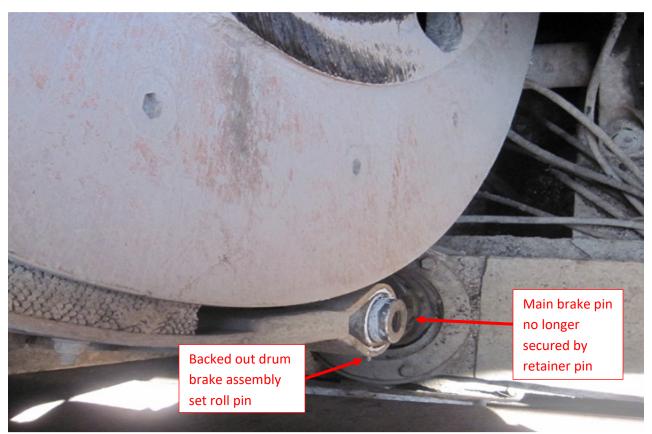
SAFETY ALERT



Safety Alert No. 369 October 25, 2019 Contact: Jason Mathews Phone: (504) 731-1496

Non-OEM Parts Were Significant Causal Factors in Two Recent Loss of Control of Traveling Block Incidents



Driller's side drum brake band assembly at the time of the September 11, 2019 incident.

On September 11, 2019, a drill crew was lowering a 7.625" casing joint. The driller was unable to apply enough brake power necessary to stop the full descent of the top drive. The Operator's incident investigation revealed that the set pin of the drum brake assembly broke/snapped off allowing the roll pin to back out of the brake assembly which prevented the drum-break from being engaged. This failure caused the top drive and casing joint to slowly lower into the joint located in the slips. The top drive descended until the traveling block rested on the casing stabbing board due to lost brake tension. The offside brake stayed engaged and slowed the descent, which helped prevent harm to personnel and limited damage to equipment.

On July 20, 2017, in a separate incident, an operator reported a dropped object incident while conducting drilling operations. The incident involved drill line that unspooled and

detached from the drawworks drum, causing the traveling block and approximately 123 feet of drill line to descend to the rig floor. The investigation report indicated improperly sized drill line drum clamp and clamp bolts were installed on the drawworks drum.



View of traveling block and unspooled cable drill line on rig floor following the July 20, 2017 incident.

Incident investigations for both of the above events revealed incorrect, non-original equipment manufacturer parts were significant causal factors.

Therefore, BSEE recommends that operators consider the following:

- Inspect drawworks systems to ensure that original equipment manufacturer (OEM) parts are installed correctly;
- Inspect the drum brake and cable retention systems as part of the six-month and 5-year periodic inspections;
- Conduct maintenance according to frequencies recommended by the manufacturer and by API RP 8B;
- Identify additional equipment where retaining pins should be inspected for deficiencies;
- Consider reviewing and verifying all dimensions and material properties of critical components; and
- Consider reviewing the use of non-OEM parts as a Management of Change (MOC) process.

--BSEE--

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.