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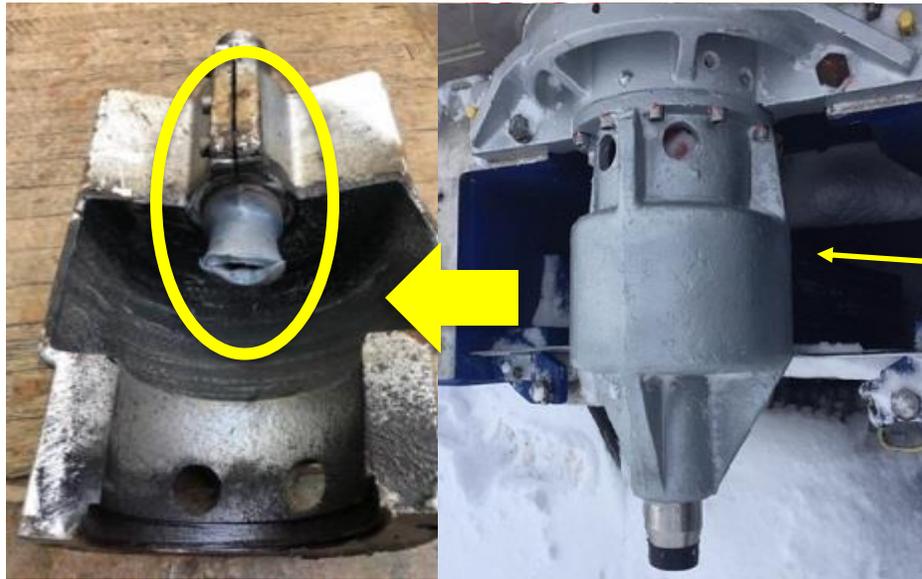
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# DRILLING MUD CENTRIFUGE FAILURE

## DESCRIPTION:

An employer experienced an equipment failure of a skid-mounted solids centrifuge. The feed tube detached from the centrifuge because of vibrations from mounting bolts that had backed out. The feed tube detached, causing the steel housing around it to be ejected. No personnel were in the area where the housing landed.



Housing around the feed tube

**LEFT:** THE HOUSING (SHOWN IN PHOTO ON RIGHT) IS TURNED OVER, SHOWING THE FEED TUBE FAILURE

**RIGHT:** NORMAL INSTALLATION OF THE FEED TUBE AND HOUSING

## CAUSE:

Vibrations from the loose bolts caused the feed tube to shear off from the centrifuge body, catapulting the housing.

## CONTRIBUTING FACTORS:

The feed tube was projected approximately 18 meters (60 feet) from the unit onto a roof panel of the neighbouring mud tank, landing on the mats below

## CORRECTIVE ACTIONS:

- Employers, including rental equipment companies, must ensure adequate QA/QC procedure to confirm the proper type and securement of bolts and other critical steps for high-RPM rotating equipment.

**Avoid the hazard of not knowing.**

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