



## Update: Trailer Axle Break

### WHAT HAPPENED?

A trailer load of garnet was being transported along a farm track to a tower site where secondary preparation of a tower was about to commence.

During the journey an axle stub has sheared off. The wheel detached from the trailer but jammed under the mud guard causing the trailer to skid along the grass track on the tire for a short distance.



### IMMEDIATE ACTION TAKEN

- Progress was halted, and the site made safe.
- The garnet was removed from the trailer to assess the damage, and the event reported to management.
- The trailer removed from service for inspection and repair, and an investigation was conducted.

### ROOT CAUSE

During previous maintenance, it was discovered that the U bolts holding the axle to the trailer were loose. These had been replaced and Nyloc nuts used to prevent them becoming loose again.

However, while the axle was loose the chattering of the axle has caused fatigue in the stub axle (half-moons can be seen in the photo above). This has led to the eventual failure of the stub axle.

### LEARNINGS

- The trailer suspension has been replaced with Duratorque axles, providing better independent suspension and eliminating the use of U bolts.
- Check U bolt tightness during trailer inspections.