



Raising Wire Failure

The following safety awareness alert has been provided by one of ModuResources' clients. ModuResources would like to thank the client for sharing the information.

What happened:

The rig was in the process of raising the mast when the wire rope parted close to the area where the wire rope passes through the becket. This resulted in the mast falling onto the A-frame causing damage to the mast in the picture below.

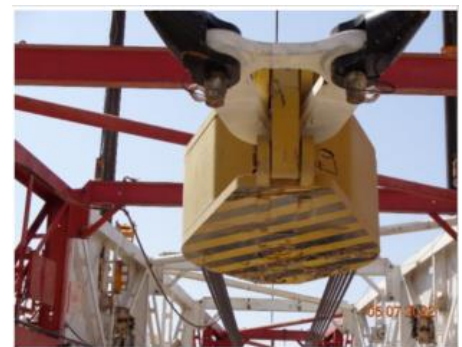
The raising wire was reported to be used only 8 times prior to the failure and was less than 2 years old at the time of the failure.

The rig has been in service for several decades and the same mast raising process had been utilised in the past. A raising wire adaptor had not been previously utilised in this process.



Left: Result of the raising wire failure.

Below: Normal set with the use of a raising line adaptor.



Contributing Factors:

- Several years ago the mast had been replaced, and the newly fitted mast was fitted with different size raising sheaves than the old mast. A sheave with a larger sheave profile could allow the wire rope to collapse under load, causing additional wear on the wire rope.
- The raising wire in use at the time of the accident was of inferior quality.
- The raising wire was not connected to a raising adaptor, but instead run through the becket.
- Measurements of the raising sheaves were not part of the maintenance system checks.
- Minimum quality requirements for the raising wire were not checked prior to purchasing.