

Hoist Line Failure

Safety Alert

Issue #:15-2016

Enform

Enform is the health and safety association for Canada's upstream oil and gas industry. We provide leading health and safety training, programs and services, touching the lives of hundreds of thousands of workers each year. We are dedicated to the continuous improvement of safety with a vision of eliminating work-related incidents or injuries in the upstream oil and gas industry.

An Industry Product

This document was developed by industry for industry. Working collaboratively, Enform works with the submitting organization representative in developing these documents to improve the industry's hazard awareness. Canada's leading oil and gas industry trade associations support the use of shared information to help companies of all sizes improve performance.

Disclaimer

This document is intended to be flexible in application and provide guidance to users rather than act as a prescriptive solution. Recognizing that one solution is not appropriate for all users and situations, it presents accepted guidance that generally apply to all situations. While Enform believes that the information contained herein is reliable under the conditions and subject to the limitations set out, Enform does not guarantee its accuracy. The use of this document or any information contained will be at the user's sole risk, regardless of any fault or negligence of Enform and the submitting organization.

Copyright/Right to Reproduce

Copyright for this document is held by Enform, 2016. All rights reserved. Enform encourages the copying, reproduction and distribution of this document to promote health and safety in the workplace, provided that Enform is acknowledged. However, no part of this publication may be copied, reproduced or distributed for profit or other commercial enterprise, nor may any part be incorporated into any other publication, without written permission of Enform.

For more information on this alert, please contact: safety@enform.ca. To view other safety alerts please visit enform.ca.

Description of Incident:

A sideboom being used in a pipe stringing operation was lifting a joint of heavy wall pipe off the bed of a transport trailer when the wire rope hoist line failed. The failure occurred while the operator was applying tension (taking up the slack) to the hoist line, to check load stability/balance prior to executing the lift. The pipe dropped back onto the trailer bunk and no injuries were incurred as the signal person and two tagline spotters were, as per plan, out of the drop zone.



Broken Hoist Line on the Ground



Close-up of the Broken Hoist Line

What Caused It?

The hoist line was damaged when a loop in the line travelled through the sheave, creating a kink and subsequent weak spot.

Contributing Factors Included:

- No pre-inspection of the hoist line was documented
- Workers were not competent in identifying defects in the hoist line including signs of separation, kinks and localized wear
- Workers failed to notice the loop in the hoist line and the loop travelling through the sheave
- Workers may have been overconfident in using the equipment and may have normalized the presence of potential warning signs

Corrective/Preventative Actions:

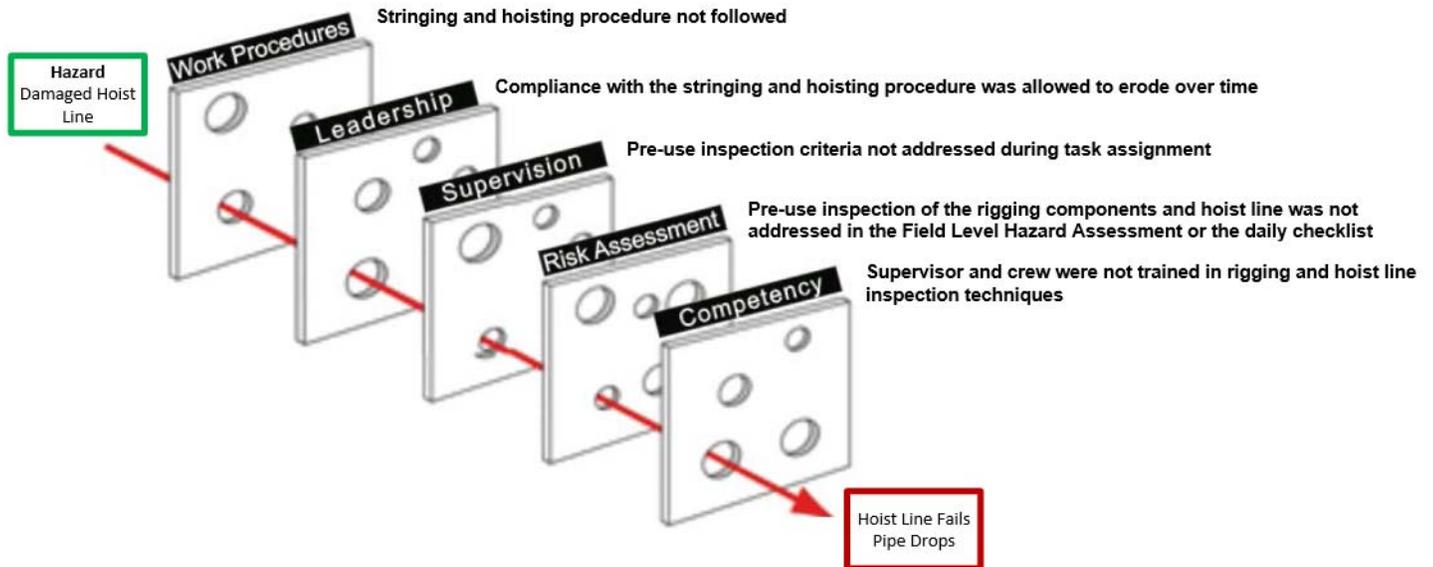
- A safe start-up sideboom stringing plan was created
- A daily pre-inspection of the hoist line was implemented and documented on the inspection checklist
- Supervisors were informed that they are accountable to ensure equipment pre-use inspections are performed when required

By industry, for industry



- Supervisors and workers engaged in pipe stringing activities were trained on basic inspection of rigging hoisting components including rejection criteria and were assessed for competency
- All supervisors and workers engaged in pipe stringing activities reviewed the stringing procedure and inspection criteria
- Daily pre-inspections of the pipe stringing sideboom are to be completed by a designated competent supervisor and operator, and documented on the sideboom inspection checklist

The incident causation model illustrates that, although many layers of barriers and controls lie between hazards and incidents, there are flaws in each layer that, if aligned, can allow an incident to occur.



By industry, for industry

