



The Safety Association for Canada's  
Upstream Oil and Gas Industry

## Drill Line Contact with Retainer Bolt Near Miss

### SAFETY ALERT

ISSUE #: 20-2011

#### Enform: Your Partner in Safety

Enform is the upstream oil and gas industry's advocate and leading resource for the continuous improvement of safety performance. Our mission is to help companies achieve their safety goals by providing practices, assessment, training, support, metrics and communication. Our vision is no work-related incidents or injuries in the Canadian 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, 2011. 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.

#### Details

Release Date: November 2011  
Incidence Type: Near Miss  
Country and Region: Alberta, Canada

For more information on this event,  
please contact: [safety@enform.ca](mailto:safety@enform.ca)

#### Description of Incident:

- At the time of the incident, the driller was working the drill string and was about to make a connection.
- He heard a noise coming from the drawworks; the rig manager was in the doghouse and went to investigate the noise. He noticed that the retainer bolt for the dog nut anchor plate on the TSM 7000 drawworks had backed out.
- Eventually, the bolt was out far enough that it produced friction on the drilling line causing two of the six strands to break.

#### What caused it:

- As the drilling line came around it would touch the bolt and spin the bolt out, a little each time, due to improper torque values upon installation of the bolts.

#### Corrective Actions:

- Drilling operation was immediately shut down to tighten the retainer bolt and fix the drill line.

#### Preventive Actions:

- Ensure daily visual check captures the drill line anchor plate.
- The 5/8" by 1-1/2" counter sunk head bolts have to be torqued to 150-180 ft-lbs, when installed.
- If the bolt holes are slightly worn; you can use Teflon tape or use Loctite 243 (blue) to help ensure the bolts do not back out, after being torqued up.
- If the wear plates are being changed out, new threaded holes should be created, if the old threaded holes are showing any signs of wear.
- If the bolts are showing any signs of wear, they are to be changed out immediately.
- Note: The bolts should wear more than the threaded holes, as the drum material is much harder

By industry, for industry

