



Worker Struck by Pile Pipe

SAFETY ALERT

ISSUE #: 20-2014

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, 2014. 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 event, please contact: safety@enform.ca

Description of Incident:

On Friday, November 14th, two workers were operating a pile driving unit with a 45 tonne mobile crane. On this day, a piece of pile pipe was standing inside the leads. When the operator lifted the hammer, the edge of the pile cap caught the collar of the pile pipe which lifted the pipe slightly. When the operator saw the collar pick up, he immediately stopped lifting the hammer causing it to bounce. The collar released from the side of the hammer allowing it to drop slightly, causing it to kick out at the bottom, striking the rigger, who, at this time was standing at the base of the leads to guide the top of the pipe onto the hammer cap pin. The bottom of the pile pipe struck the rigger on the inside of the right thigh and pushed him backwards onto the ground. This resulted in a broken femur, a fractured hip socket and a bruised lung, caused by the impact of the rigger hitting the ground.

What Caused It:

As the hammer cap was being raised in the leads, it caught the collar on the top of the pile pipe. This was caused by the position of the pile pipe in the leads.

Corrective/Preventative Actions:

- The set up for pile driving procedures have been reviewed and revisions to these procedures have been made. These revisions will be implemented to prevent interference between the pile pipe and hammer when loading pipe into the leads.
- The rigger will be clear of the leads prior to the hammer being raised.
- A safety chain will be installed to contain the pile pipe within the pile driving leads.
- All operators will ensure that constant and clear communication is being made with the rigger during all pile driving processes.
- The revised pile driving procedure will be reviewed with all pile driving operators and riggers.
- The safety chain modification will be made to all pile driving units immediately, prior to continuing any pile driving work.

By industry, for industry





Safety Chain

- 1/2" Steel Chain
- 3/8" Hammer Lock
- Chain Hook
- 1/2 " steel Links

welded on Each side of
the Leads



By industry, for industry

