

WORKER STRUCK BY PIPE WRENCH

Energy Safety Canada is the national safety association for the oil and gas industry. We develop and support common industry safety standards, deliver effective learning systems, share data analysis and safety expertise with workers and employers, and advocate for worker health and safety. Our goal is the same as industry's - zero injuries, zero incidents.

Share and Collaborate / Energy Safety Canada works collaboratively with organizations to develop Safety Alerts that improve hazard awareness and injury prevention. Canada's leading oil and gas industry trade associations support the sharing of information to help companies of all sizes improve safe work 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 Energy Safety Canada believes that the information contained herein is reliable under the conditions and subject to the limitations set out, Energy Safety Canada 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 Energy Safety Canada and the submitting organization.

Copyright/Right to Reproduce / Copyright for this document is held by Energy Safety Canada, 2018. All rights reserved. Energy Safety Canada encourages the copying, reproduction and distribution of this document to promote health and safety in the workplace, provided that Energy Safety Canada 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 Energy Safety Canada.

To view other safety alerts please visit EnergySafetyCanada.com.

DESCRIPTION:

A worker was struck in the chest by a pipe wrench and sustained six broken ribs and a damaged spleen. The impacted worker was a contracted fishing operator, or "fisherman", on a service rig.

The fisherman was on the rig floor while waiting for the service rig crew to complete their tasks. A service rig crew member removed the last drill collar and installed a lift sub using a pipe wrench. A worker installed the sub and fisherman then operated the power tongs to allow the tightening of the lift sub's remaining threads. At the same time, another crew member released winch controls, which redirected all hydraulic power to the power tongs and revved the engine. The extra engine capacity in the power tongs spun the equipment and attached pipe wrench into the fisherman. The impact threw the fisherman several feet, he was immediately transported to the hospital.



CAUSE OF INJURY OR LOSS:

A pipe wrench was left on the lift sub while power tongs were being operated, and the re-direction of all hydraulic power to power tongs when the engine revved.

CONTRIBUTING FACTORS:

- Unable to disable hydraulic power to power tongs due to rig design
- Fisherman operated the equipment while not formally authorized
- Incomplete risk assessment highlighting potential hazards and outcomes

CORRECTIVE ACTIONS:

- Communicate any equipment energy hazards (potential hydraulic power issues) to workers on site
- Formal turnover and authority procedures should be in place and used
- Ensure no third party workers are in the area until control of authority has been transferred
- Companies could inventory all their equipment where the hydraulic power hazards remain and determine whether or not feasible to retrofit