



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

BOP Heater Blanket Electrical Short Resulting in a fire

SAFETY ALERT

ISSUE #: 07-2011

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: March 31, 2011
Incidence Type: Fire
Country and Region: Alberta, Canada

For more information on this event, please contact: safety@enform.ca

Description of Incident:

- The rig crew arrived on location in the morning to discover that overnight the BOP heater blanket had caught fire and extinguished itself when it completely burnt.
- The heater blanket was plugged directly into the rigs electrical plugs located on the A-leg as the cables easily reached the plugs.
- Equipment that was sent out with the blanket included an electrical cable spool that incorporated Ground Fault Circuit Interrupter (GFCI) protection.

What Caused It:

- No operating instructions were sent out with the rental equipment, therefore, the crew was unaware of the need to use the electrical cables supplied or that GFCI protection was needed.
- The electrical malfunction that occurred failed to trip the circuit breaker on the rig.
- The Alberta OH&S Regulation, Section 8(2) states, "If an employer is required to develop procedures or put procedures in place under the Act, the procedures must be in writing and available to workers at the work site affected by them." The Alberta OH&S Act, Section 2(4) states, "Every supplier shall ensure that any tool, appliance, equipment, designated substance or hazardous material that the supplier supplies complies with this Act, the regulations and the adopted code." Together these sections support that the supplier provide operating instructions with the equipment supplied to the employer and the employer must ensure the instructions are available to workers.

Corrective Actions:

- Ensure operating instructions are available and reviewed prior to operating any equipment.
- Inspect heater blankets for damage prior to use.
- Ensure a GFCI is installed with BOP heater blankets.

More information on page 2.....

By industry, for industry





Precautions and Preventative actions:

- Clean B.O.P. equipment prior to heater installation
- Warm B.O.P. heater prior to installation
- Ensure heater units are fastened to B.O.P. properly
- Ground fault protection must be in place between the power source and the B.O.P. heater
- Ensure ground fault circuit interrupter is in place when heater is installed
- Ensure power supply circuit breaker used is properly matched to the maximum safe operating amperage of the heater sets
- Do not leave heaters connected to the power supply when not in use
- To avoid damage, remove heaters from B.O.P. equipment prior to installation or removal from wellhead
- Do not strike heater unit with tools/equipment and avoid crushing heaters with slings or chains as damage to electrical components could occur.

- When installing or using a B.O.P. heater, report any suspected damage to the well site supervisor. If the heater unit is damaged, remove heater from B.O.P. equipment and notify rental company
- Tampering with or altering heater unit's components could compromise safety features in feature design.