# **Structural Railing Failure**

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#### Enform

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

# **Description of Incident:**

An oilfield worker was in the process of viewing the cuttings coming over the shale shakers from the top platform of the mud tank. The worker leaned over the railing to get a better view. The railing system failed resulting in the worker falling with the railing to the ground below. The worker was not seriously injured, but there was high potential for severe injury or fatality in this incident.



Folding hand rail bracket failure

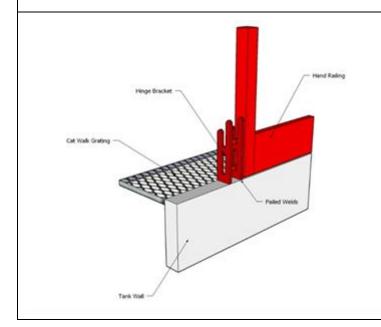


Diagram depicting the location of the failed welds on hand railing

By industry, for industry













#### What Caused It:

Moisture penetrated the welded area of the manufactured fold-down-style railing brackets that were welded to the mud tank. Over time, this caused metal fatigue which resulted in failure to provide fall protection.

## **Corrective/Preventive Actions:**

Investigation provided the following recommendations:

- Always be aware and alert; what appears to be safe may not be. Always test the integrity of a railing before bearing weight or leaning on it.
- Be aware that this type of fall protection is widely used and accepted where height restrictions play a role with mobile equipment; however, there is no legislative requirement for the engineering of these brackets. Industry/operators should develop an inspection process for such equipment.