



Dueblin Joint on SC13

Date

23 July 2026



Executive Summary

Cost \$0

What Happened?

Where Did It Happen?

Facility:

Equipment:

Why Did It Happen?

Root Cause	Corrective Action(s)
Corrosion due to aggressive water chemistry	
excessive temperature exposure	
Failure to perform regular maintenance on treatment systems	1. Evaluate to change frequency of changing the filters more often. 2. Conduct PM's to change filters on downdays
fatigue failure of joint components	
Inadequate water treatment procedures	
material fatigue due to temperature fluctuations	
misalignment during installation	3. Create a work instruction to ensure that the installation is correct.
Poor water quality in feeding from condensate system	

Timeline

07/23/2026 00:00

Start of Analysis

Summary of Findings

A failure event occurred involving a pump, which was primarily attributed to bearing failure. Several hypotheses were explored to determine the underlying causes, including overload, corrosion, wear, fatigue, and high vibration. Among these, fatigue was verified as a significant contributing factor to the failure of the pump.

After further investigation, a physical root cause was identified as imbalance, which was also verified. Imbalance often leads to detrimental operational conditions, such as increased vibration, ultimately contributing to fatigue in the bearing. The combination of these factors significantly compromised the pump's reliability and performance.

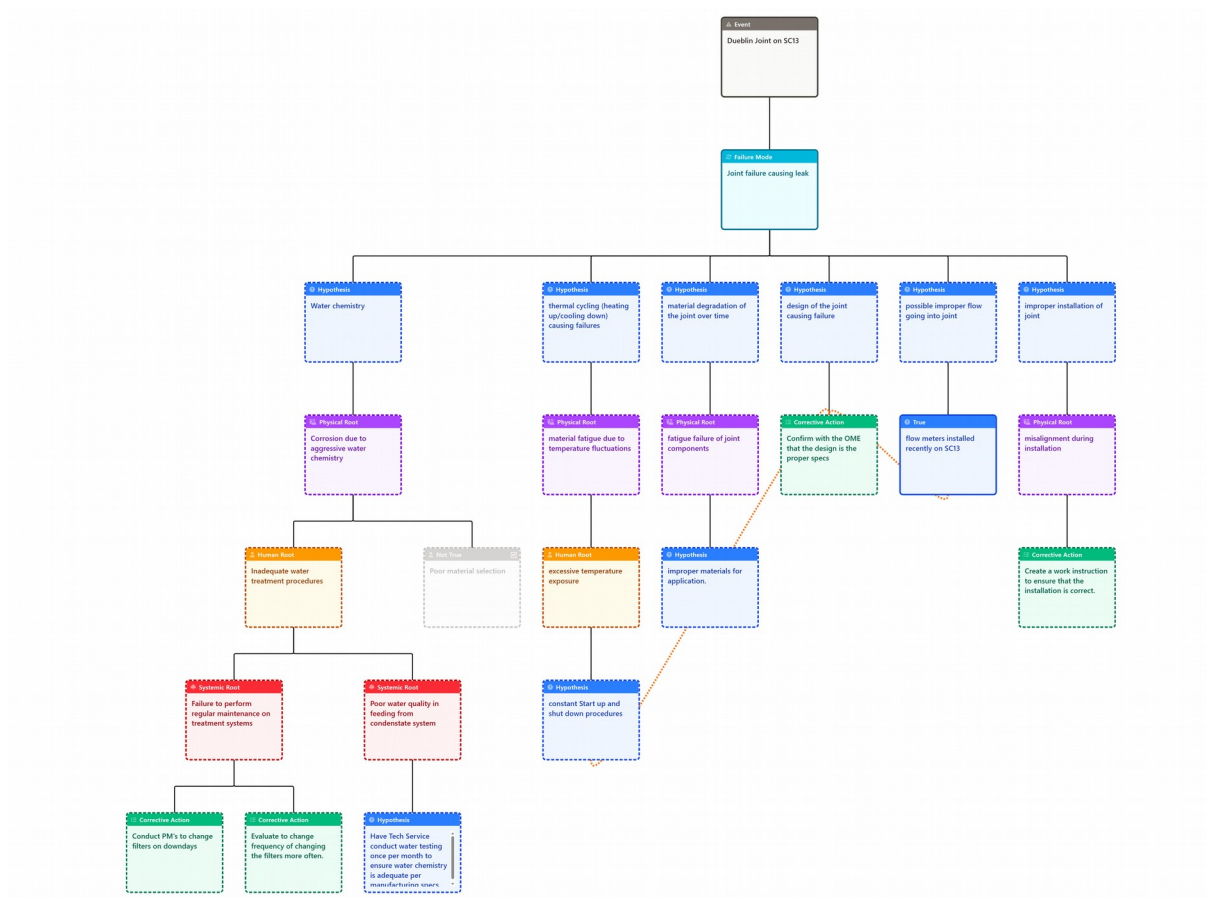
To address these issues, corrective actions will focus on mitigating imbalance through regular maintenance practices and proper alignment of components. Additionally, vibration analysis will be implemented to monitor pump health and preemptively identify any conditions that could lead to bearing failure. Training for human operators will also be prioritized to enhance awareness of operational best practices and reduce the occurrence of imbalances and other contributing factors.

Tasks

Type	Node	Assignee	Task	Due
v	Have Tech Service conduct water testing once per month to ensure water chemistry is adequate per manufacturing specs.	Mike Urie, timothy.larson@sappi.com	Conduct water testing in condensate system — Test water to ensure water chemistry is adequate per manufacturing specs.	31 Aug 2026
v	improper materials for application.	Mike Urie	Dublin Factory Rep review. — Meet with Factory Rep	31 Aug 2026

v	design of the joint causing failure	Mike Urie	Confirm with OME regarding design of joint — Confirm with OME regarding design of joint is the proper specs	31 Aug 2026
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Logic Tree



Root Causes and Findings

Type	Root Cause	Corrective Actions
PHYSICAL	Corrosion due to aggressive water chemistry	
PHYSICAL	fatigue failure of joint components	
PHYSICAL	material fatigue due to temperature fluctuations	
PHYSICAL	misalignment during installation	1. Create a work instruction to ensure that the installation is correct.
HUMAN	excessive temperature exposure	
HUMAN	Inadequate water treatment procedures	
SYSTEMIC	Failure to perform regular maintenance on treatment systems	1. Evaluate to change frequency of changing the filters more often. 2. Conduct PM's to change filters on downdays
SYSTEMIC	Poor water quality in feeding from condensate system	

Team Members

Name	Description	Email
Wayne Nordin	Area Maintenance Planner	wayne.nordin@sappi.com
Mike Urie	Operations Maintenance Coordinator	michael.urie@sappi.com
Rick Kesty	Finishing & Shipping Superintendent	rick.kesty@sappi.com

Attachments

Images

Other

Filename	Type
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