

FAILURE ANALYSIS



As a company that specializes in preventing structural failure in drilling components, we can state, with some authority, you can not prevent all failures, but you can certainly learn from them when they occur. We have performed more than one thousand failure analyses in the past 25 years, all on drilling equipment and OCTG, and each has contributed to our corporate knowledge on failures—and how to prevent them. As industry leaders in engineering and quality assurance services,

T H Hill can find the root cause of a failure *and* give you practical recommendations on how to avoid similar failures in future operations. After all, the value in analyzing a failure should come from not having to pay for it more than once.

CONTACT US

Contact us if you have experienced a failure in any of the following types of equipment:

- Drill String Components
 - Specialty Tools
 - Casing & Tubing
- Landing String Components
 - Lifting & Handling Equipment

The cost of a single downhole failure can easily reach seven figures, so multiple failures of the same type can be catastrophic.

What Happened?

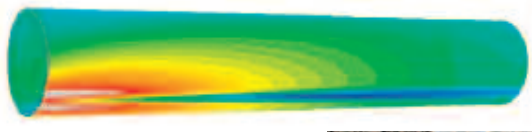
Was it...

The material?

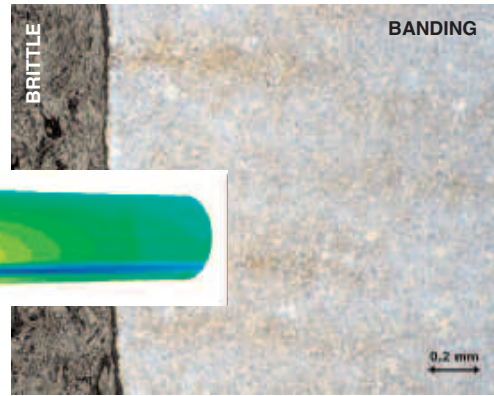
The equipment quality?

The design?

The operating conditions?



The first step in addressing a failure is determining why it occurred. The root cause of a failure may be simple and established by traditional metallurgical and material testing. Or it may be complex and involve analysis of operating loads and design, and their resulting impact at the string or tool level. To arrive at the correct and complete answer, you need to approach the problem with the proper set of skills. T H Hill has written industry standards for manufacturing, design & operation, and inspection to define the optimal properties, criteria and processes for reducing the risk of downhole failure. This experience, when coupled with our engineering and field expertise, gives us a unique perspective on failures and their causes.



How Do I Avoid Another Failure?

Should I ...

Change my inspection practices?

Modify my designs?

Replace my equipment?

Address my operating parameters?

These are literally the million dollar questions. The cost of a single downhole failure can easily reach seven figures, so multiple failures of the same type can be catastrophic. Determining the cause of a failure is just the first step. We give you practical steps to avoid similar failures in future operations. We routinely work, in both engineering and quality assurance functions, on the most complex and challenging wells in the world. We use this corporate knowledge to provide you with specific recommendations on inspection, design and operating changes that will address the root cause of the failure and reduce your risk of experiencing the same problem again.

