

From: [Fox Matthew](#)
To: [Read Leah](#)
Cc: [Lamm Adrienne](#); [Budinski Michael](#)
Subject: ERA20FA043 - Milton, Florida - Materials Laboratory Exam Results
Date: Thursday, January 16, 2020 11:46:55 AM
Attachments: [IMG_9846.JPG](#)
[image002.png](#)

Leah,

The elevator torque tubes are shown as received in the attached image. The rod ends were fractured in the threaded portion of the end fitting attachments. Fracture surfaces had rough matte-gray fracture features that were partially covered with orange oxides consistent with post-fracture oxidation. The fracture pattern and deformation associated with each fracture were consistent with ductile overstress fractures with local bending deformation. No evidence of preexisting damage was observed.

Thank you,
Matt



Matt Fox
Senior Materials Engineer
National Transportation Safety Board

