

Discrepancy Report Number: 12026

Traveler Title:

464441 - D - HL-LHC AUP Coil Interface Traveler

Step No.:

4.2 - Responsible Authority must specify which cable should be used for preparing the cable reels. Record the Cable Reel Serial Number used and the total length of the cable provided by the vendor.

Serial Number(s):

[QXFA-CL-125 - 0](#)

Discrepancy Description:

During cable preparation, it was found that there is some stain on the surface of the beginning of 6.8 m long cable from Blue/Red marked end (see the pictures in the attachment), which looks like the copper oxidation.

The techs also noticed a couple marks at 162 meters from Blue/Red end, through the insulation, however the marks are barely visible without shining a light on the cable.

Miao Yu - 6/23/2020

Cause of Nonconformance:

Cable 1132 was made in the summer (fabricated at LBNL in 2019/06/11, braided at NEWT 2019/07/30 – 2019/08/04, and arrived at FNAL on 2019/08/22) and stored for 10 months at FNAL IB3 floor equipped with A/C and humidity control.

The accelerator data shows that there was fairly high humidity at NEWT during the insulation process (around 60-70%). It is likely that the non-conformance was caused during the cable insulating process at the vendor site or during the cable shipment under high humidity environment.

Miao Yu - 6/23/2020

Disposition: - Awaiting Disposition (Giorgio Ambrosio)

Corrective Action to Prevent Recurrence:

Identified problem area:

- Material Manpower Method Machine Measurement

Reviewed by:

Date: