

ACCEPTANCE SUMMARY FOR LHC MAGNETS BUILT AT BNL

Magnet D2L103

Date of this summary: 27 January 2005

This document contains a short summary of the acceptance status (in italics, just below), the minutes of the acceptance meeting, and actions taken after the acceptance meeting [in square brackets within the text of the minutes, or as footnotes].

Acceptance status:

The magnet has been approved for acceptance.

The field quality data have been loaded in the CERN database.

The survey data have been sent to CERN staff.

MINUTES OF ACCEPTANCE MEETING

Date of acceptance meeting: 6 January 2005

Present at acceptance meeting: Escallier, Hocker, Jain, Muratore, Plate, Porretto, Schmalzle, Wanderer, Willen

Quench Data: Muratore showed the quench performance of the magnet. In forced flow, the magnet exceeded the specified minimum operating current on the second quench. The magnet was then powered several times to 7.5 kA, and ran for an hour at 7.5 kA, without quenching. In liquid, it reached 7.5 kA without quenching. (As called for in the test plan, no cold field quality measurements were made, so the “warm finger” – anticryostat – was not installed for the test.) The quench plots and tabulations are available on the Web at

http://www.bnl.gov/magnets/LHC_Acceptance/D2_Test_Results.asp

Field Quality: Jain showed the warm data and from the magnet, the warm-cold correlations, and the estimated cold field quality. (His talk is at the Web address given above.) Pilat reviewed the field quality data after the meeting and then approved the magnet [2].

Engineering: Escallier reported that the magnet meets electrical specifications. Schmalzle and Plate said that the magnet meets mechanical specifications.

QA: Hocker approved the documentation.

Safety: Durnan reviewed the documentation prior to the meeting and approved it by email [1].

Survey: Schmalzle said that he had reviewed the survey measurements and found them acceptable. Survey data were sent to D. Missiaen on 15 December for review.

These notes written by P. Wanderer

FOOTNOTES

[1] From J. Durnan to P. Wanderer, 4 January 2005:

Reviewing my files I did not find any safety concerns for this magnet.

Jim Durnan
ESH Coordinator
Superconducting Magnet Division

[2] Email from Pilat to Wanderer, 24 January 2005:

I looked at the D2L103data and I do not see a problem with the field quality.