Electronic Signature Information

Name	DOC1620970
Revision	1
Type	Controlled Document
Title	SN Quench Recovery Resistance Clarification
Originator	212000253_michelle_g_sansbury
Release Date	
Obsolete Date	

Name	Reason For Change	File Size (Bytes)
SN_DOC1620970_Magnet_Quench_Recovery_Resistance_R001.docx	SN_DOC1620970_Magnet_Quench_Recovery_Resistance_R001.docx	363392

Route	Signer	Function	Status	Comments	Completion Date
R-6019691	212000253_michelle_g_sansbury	IB Test Engineer	Approve	Approved	10 Nov 2014 13:32:42 GMT
R-6019691	212011747_timothy_j_havens	LSSD-LSI	Approve	Approved	4 Nov 2014 20:54:43 GMT
R-6019691	212012451_juan_r_rosa	QARA	Review	Approve	5 Nov 2014 20:48:24 GMT
R-6019691	212031211_yuri__lvovsky	LSD	Review	Reviewed and approved.	7 Nov 2014 14:47:42 GMT
R-6019691	212062892_andrei__baikalov	Des and Dev	Approve	approve	7 Nov 2014 19:47:30 GMT

Periodic Review

There are no signatures or routes related to this business object.

Obsolesence Approval

There are no signatures or routes related to this business object.

* Printed versions are For Reference Only *
+ Indicates a task was reassigned from an original assignee

Approved

Quench Recovery

Resistance Value Clarification

1. SERVICE NOTE CLASSIFICATION

2. PURPOSE

The purpose of this service note is to communicate a required update to the Quench Recovery section of 5495018, Magnet and Cryogen Manual for Passively Shimmed Magnets. Section 10.20.7 contains an incorrect reference to an open circuit.

3. SCOPE

This service note applies to

A. 1.5T MR450w (HM Series) Magnets
B. 3.0T MR750w (UA Series) Magnets

4. REFERENCES

A. This service note is owned by Magnet and Gradient Engineering
B. Questions pertaining to this Service Note should be directed to your Regional Magnet & Cryogen (MAC) Team Leader or the Magnet Support Team at the Online Center
C. This service note will be incorporated into the next release of 5495018, Magnet and Cryogen Manual for Passively Shimmed Magnets.

5. SAFETY

Chapter 1 of the Magnet and Cryogens Subsystem Manual must be reviewed before the procedures in this Service Note are completed. All safety procedures must be adhered to at all times while performing this procedure.

Quench Recovery

Resistance Value Clarification

6. QUENCH RECOVERY SECTION PROCEDURE UPDATE
Referencing section 10.20.7 (in 5495018, Revision 002) –
PASSIVELY SHIMMED MAGNETS ONLY

10.20.6. Purge the Recondenser with 4 bottles of 99.999% ("five nines") helium gas, inputting to the Recondenser shield vent line and exiting through the magnet's helium vent by opening Vent Valve V2. If applicable, use the DVw Deicing Kit (5342456) to assist with deicing the magnet. Refer to the Recondenser Deicing subsection of "Ice Removal Procedures."

10.20.7. Connect a DVM between an engaged Main Lead Extension and an unpainted surface on the Cryostat to check for a Main Coil grounding fault. If an open circuit is not indicated, contact your Regional Magnet & Cryogen (MAC) Team Leader or the Magnet Support Team at the Online Center.

10.20.8. Perform Magnet Electrical Checks as detailed within the Commissioning Check section of this manual.

10.20.9. Check the Pressure Gauge for damage, replacing if required.

10.20.10. Refill the magnet in conformance with "Liquid Helium Fill."

10.20.11. Check Cryostat pressure after liquid helium fill and stabilization. Do not adjust Cryostat pressure at this time.

This section will be updated as follows:

10.20.6. Purge the Recondenser with 4 bottles of 99.999% ("five nines") helium gas, inputting to the Recondenser shield vent line and exiting through the magnet's helium vent by opening Vent Valve V2. If applicable, use the DVw Deicing Kit (5342456) to assist with deicing the magnet. Refer to the Recondenser Deicing subsection of "Ice Removal Procedures."

10.20.7. Connect a DVM between an engaged Main Lead Extension and an unpainted surface on the Cryostat to check for a Main Coil grounding fault. Expected resistance values are noted below; if readings outside these values are obtained, contact your Regional Magnet & Cryogen (MAC) Team Leader or the Magnet Support Team at the Online Center.

- 1.5T MR450w (HM Series): 9,550 Ohms to 14,600 Ohms
- 3.0T MR750w (UA Series): 6,600 Ohms to 9,000 Ohms

10.20.8. Perform Magnet Electrical Checks as detailed within the Commissioning Check section of this manual.

10.20.9. Check the Pressure Gauge for damage, replacing if required.

10.20.10. Refill the magnet in conformance with "Liquid Helium Fill."

Quench Recovery

Resistance Value Clarification

Revision History							
REV	Affected Page(s)		Description of Content Changed	Reason for Change or Change Control Number	Author	Effective date of Document	Periodic review date
01	ALL		Initial Release	Error within 5495018. Copy error from legacy LCC manual. HM's and UA's will not have an open circuit - because the coil circuit grounding scheme on HM and UA is different from LCC which has open ground.	Michelle G. Sansbury	My Workshop Release	Does not Apply to Service Notes
Yes	No	NA		Enter Validation Information or Rationale if "NO" or "NA" for Validation or Training			
☒	☐		Typo or Format Change	Copy error from legacy manual.			
☐	☐	☒	Regulatory Filing				
☐	☐	☒	Validation	No change to existing process. Corrected resistance values.			
☐	☐	☒	Training	None required. No change to existing process.			
☒	☐	☐	Communication	Via email, upon MWS Release			
☐	☐	☒	Labeling, (list)				
☐	☐	☒	Other Documents, (list)				
☐	☐	☒	Other (describe)				