Non-Conformity on PXMQNEC4WP-B2000030 – BR.QFO161

- Water leak discovered by RF specialist during intervention on the 18/6
- On the morning of 18/6 an inspection of the magnet was made while cycling, no coil movement was observed;
- The insulation has been removed to find the ‘micro leak’;
OPTIONS:

IN-SITU REPAIR

• The leak has been stopped by hammering the conductor to close the hole allowing the machine to run during the weekend. An inspection on the morning of the 21/6 shows that the temporary repair is holding for the moment;
• MSC are nervous to attempt a direct repair of the hard brazing as it is possible the leak will become worse, replacing the brazed section completely is best completed in our workshop;
• MSC are making tests to reinforce the hard brazing with a soft brazing which will not risk to deteriorate hard brazing and should hold until at least the upcoming YETS;
• MSC will be ready to perform the ‘soft brazing’ repair by Wednesday morning.
MAGNET EXCHANGE:
• A spare magnet is ready and certified, however the it has the wrong chambers installed;
• The second spare magnet with the correct chamber needs a few modifications to bring it up to date and certification;
• Both magnets will be transported to our workshop in the coming days. Changing the chambers in the spare magnet will take a certain time and effort (and potentially damage a set of bellows etc...)

In case of magnet change, how long will the whole procedure take and which steps are involved?

Magnet intervention:
• 1 h lock-out
• 1 h disconnection
• 2 * 1 h transport
• 1-2 h alignment
• 1 h connection
• 1 h remove lock-out

Vacuum Intervention:
• 1 h venting
• 10 min disconnection
• 1 h reconnection
• 2 h pumping and leak detection (best scenario)
• More than 1 week for the septa back-out

Radiation Levels:
As measure on the 21/06 15 µSv/h ambient, 45 µSv/h on contact with chamber