

MMM and TEMB - 29 June, 2009

## Status Report of Magnet Work Week 26 / 2009 Francesco Bertinelli - TE/MSC

On behalf of - and with several contributions from - surface and IC teams



- Sector 3-4: last W closed Tuesday 23 June
  - Vacuum leak from left support MB2104 in 28L4 being investigated
  - Vacuum leak in one W connection being repaired
  - DN200 repainting to be done
- Sector 5-6: last W closed Friday 26 June
  - Vacuum leak in QBQI.19R5 being repaired
  - Vacuum leak from IFS box in B32L6 (MB2229) being investigted
- Sector 1-2: cool-down started
  - Quench heater (x3) problem, see ELQA



- Is now the first priority, objective all closed for end W28
- Large workload: overall 67 M to be rewelded and W to be closed, 46 busbar splices to be resoldered, 25 (x5) spools for US welding
- Monday evening 29 June: transport ventilation units from 6 to 7, move all large machines
- Actions to protect fragile thermometer connections and pre-inspect/protect fragile PIMs and nested bellows
- Important: ELQA support needed this week (with short reaction times) to validate US spools



 Connection Cryostat intervention started Monday 23 June: accident with M lines still under 3.5 bar (rel.), no injuries

Endoscopy: supports of M3 Upstream in CC 11L5 in same position as 2008 intervention, no further movement

Segment resistance measurements, MB and MQ

RF Ball Test (Point 5 to Point 4, ~2.5ms<sup>-1</sup>) passed Wednesday
24 June, both V1 and V2. If confirmed in other sectors will remove a constraint in future

There will be no PIM intervention (no preventive replacement in QQBI.7R4, QQEI.11L5, QBQI.8L5)

DN200 work started (S108 and EN-MME teams), all BLM removed/displaced, paint removal. Started DFBA L5.



## **RF Ball test**

Y 1	iswop@cfv-sr5-bpmb1la:/nfs/cs-ccr-nfs6/vol22/u1/bi	op/BPMLHC	biswop@cfv-sr5-bpmb2la:/nfs/cs-ccr-nfs6/vol22/u1/biswop/BPMLHC
<u>F</u> ile <u>E</u> dit <u>V</u> iew	<u>T</u> erminal Ta <u>b</u> s <u>H</u> elp		<u>Eile Edit View Terminal Tabs H</u> elp
This step = 110	34		This step = 1167
BPMSW.1L5.B1	Н =	). V = 0	BPMSW.1L5.B2 H = 0, V = 0
BPMSY.4L5.B1	H =	V = 0	BPMSY.4L5.B2 $H = 0, V = 0$
BPMYA.4L5.B1	H =	V = 0	BPMYA.4L5.B2 $H = 0, V = 0$
BPM.6L5.B1	H =	), V =	biswop@cfv-sx4-bpmb1ra:/nfs/cs-ccr-nfs6/vol22/u1/biswop/BPMLHC
BPM.8L5.B1	TRIG 589 589 (H = 7579, V = 6259), H =		DISWOP@CIV-SX4-DPMD1ra:/nis/CS-CCF-nis/Voi22/u1/DisWop/BPMLHC
BPM.10L5.B1	TRIG 612 612 (H = 11281. V = 14997), H	11281. <u>F</u> ile <u>E</u> dit	<u>V</u> iew <u>T</u> erminal Ta <u>b</u> s <u>H</u> elp <u>E</u> ile <u>E</u> dit <u>V</u> iew <u>T</u> erminal
BPM.12L5.B1	TRIG 650 650 (H = 18631. V = 18667), H		
BPM.14L5.B1	TRIG 691 691 (H = 14922. V = 15055), H	· IIIIS SLEP	
BPM.16L5.B1	Н =	V = PPMIB.5R4	
BPM.18L5.B1	TRIG 784 784 (H = 17550. V = 17102), H	17550 HID. 3K4	
BPM.20L5.B1	TRIG 838 838 (H = 27123. V = 26372), H	= 17550 BPMCA.7R4	
BPM.22L5.B1	TRIG 892 892 (H = 23671. V = 23689), H	- 23671 BLM- 0R4.	
BPM.24L5.B1	TRIG 946 946 (H = 14189. V = 17456), H	14189 BPM.11R4.1	
BPM.26L5.B1	TRIG 995 995 (H = 12805. V = 18684), H	= 12805, BPM.13R4.1	
BPM.28L5.B1	TRIG 1042 1042 (H = 13816. V = 16803),	I = 13816 BPM.15R4.1	B1 TRIG 1564 1564 (H = 17356. V = 16934), H = 17356, V = 16934 BPM.15R4.B2
BPM.30L5.B1	TRIG 1087 1087 (H = 20299. V = 22861),	I = 2029g BPM.17R4.1	BI TRIG 1522 1522 (H = 11402. V = 12569), H = 11402, V = 12569 BPM.1/R4.B2
BPM.32L5.B1	TRIG 1132 1132 (H = 16187. V = 16731),	H = 16187 BPM.19R4.1	B1 TRIG 1479 1479 (H = 15299. V = 16548), H = 15299, V = 16548 BPM.19R4.B2
		RDM 21D/ 1	R1 TPTC 1/37 1/37 (U = 18750 V = 21261) U = 18750 V = 21261 RDM 21R/ R2
<b>*</b> E	iswop@cfv-sr5-bpmb1lb:/nfs/cs-ccr-nfs6/vol22/u1/bi	OP/BPMLI BPM.23R4.1	B1 TRIG 1396 1396 (H = 13804. V = 15069), H = 13804, V = 15069 BPM.23R4.B2
	Terminal Tabs Help	BPM.25R4.1	
		BPM.27R4.1	
This step = 110	ю Н =	), V = BPM.29R4.1	
BPMS.2L5.B1 BPMWB_4L5_B1	H = H =	V = BPM.31R4.1	
BPMR.5L5.B1	H = H =	V = BPM.33R4.1	
BPMR.7L5.B1	TRIG 583 583 (H $3275$ , V = 3755), H =		
BPM. JL5. P1	TRIC 500 505 (H = 10320. V = 12189), H =		biswop@cfv-sx4-bpmb1rb:/nfs/cs-ccr-nfs6/vol22/u1/biswop/BPMLHC
BPM.11L5.B1	TRIG 631 631 (H = 15081. V = 16241), H		
BPM.13L5.B1	TRIG 672 672 (H = 16223. V = 17424), H	- 16223	<u>View Terminal Tabs Help</u> <u>File Edit View Terminal</u>
BPM.15L5.B1	TRIG 713 713 (H = 13665. V = 17424), H	This stop	= 1724 This step = 1723
BPM.17L5.B1	TRIG 761 761 (H = 19657. V = 21225), H		H = 0, V = 0 BPMWA.B5R4.B2
BPM.19L5.B1	TRIG 811 811 (H = 18641. V = 16168), H		H = 0, V = 0 BPMYB.6R4.B2
BPM.21L5.B1	TRIG 866 866 (H = 22459. V = 21286), H		
BPM.23L5.B1	TRIG 919 919 (H = $18676$ . V = $22428$ ), H		
BPM.25L5.B1	TRIG 972 972 (H = 27989. V = 21175), H	,	
BPM.27L5.B1	TRIG 1020 1020 (H = $19060$ . V = $19473$ ),	· · · · · · · · · · · · · · · · · · ·	
BPM.29L5.B1	TRIG 1066 1066 (H = $12304$ . V = $16119$ ),		
BPM.31L5.B1	TRIG 1111 1111 (H = 18643. V = 16152),	I = 18643  RPM 18R4 I	B1 TRIG 1500 1500 (H = 15906. V = 1512), H = 15100, V = 15127 $\mu$ M.1004.02 B1 TRIG 1500 1500 (H = 15906. V = 17357), H = 15906, V = 17357 BPM.18R4.B2
BPM.33L5.B1	TRIG 1157 1157 (H = 12372. V = 12172),	I = 12372  BPM 2004  I	B1 TRIG 1457 1457 (H = 16500. V = 19030), H = 16500, V = 19030 BPM.20R4.B2
Π		BPM.22R4.1	
		BPM. 24R4.1	
		BPM.26R4.1	
		BPM.28R4.1	
		BPM.30R4.1	
		BPM.32R4.1	
		BPM.34R4.1	B1 TRIG 1176 1176 (H = 14921. V = 16639), H = 14921, V = 16639 BPM.34R4.B2





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 Open W and cut M3 for 2 dipole outliers as of this morning Monday 29 June

- QBBI.A16L5, QBQI.16L5, QQBI.15L5, QBBI.B18L5, QBBI.A18L5
- Splice Quality Control, R16 measurements, gammas
- Start splice repair Wednesday, ELQA Friday
- If we had an indication of potential beam effect on CC splices, we could have an aimed intervention ...
- Repeat segment measurements at more uniform temp?
- Further interventions only if discussed/approved LMC Wednesday
- As we stand, plan to close 4-5 end W28