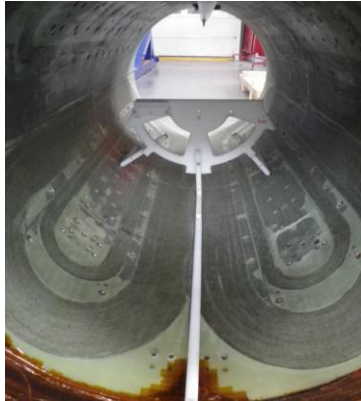


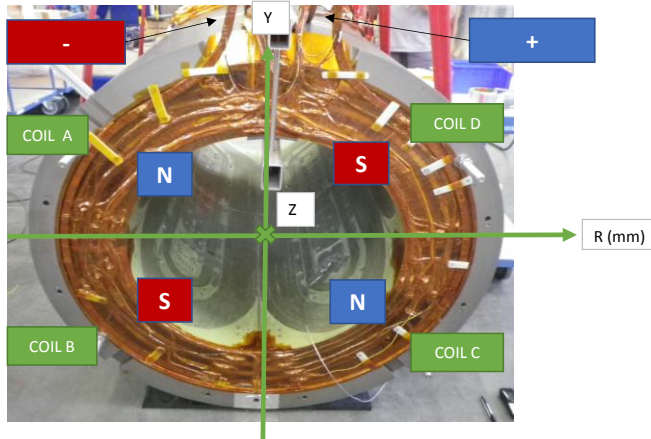
SIGMAPHI REFERENCE: 318711 Q2
 Serial N°: 1
 Date of control & operators: 18/08/2015 by ALB
 Document Reference: JLAB Q2_vérification du champ avant envoi SDMS

Polarity control

View of the Hall probe tool inside the magnet



View from electric side:



Magnetic control-Field versus current @R200mm

Device used: FW BELL Gaussmeter 8010 (SN: 1213004) & Hall probe 1 axis (SN: 1560026) / Teckelec power supply

Y=Z=0mm & R200mm

Measurement

Current approx value (A)	Field By value (G)	Field over current (T/A)
9.2	-56.89	-6.183696
19.3	-114.38	-5.926425
29.3	-175.75	-5.998294
39.3	-232.4	-5.913486
49.3	-288.29	-5.847667

Expected values (from simulation performed with Q3 yoke and considering 20% less field)

Current (A)	Field By value (G)	Field over current (T/A)
10	-52	-5.200000
20	-103	-5.150000
30	-155	-5.166667
40	-206	-5.150000
50	-258	-5.160000

Magnetic control-Transverse field @50A

Device used: FW BELL Gaussmeter 8010 (SN: 1213004) & Hall probe 1 axis (SN: 1560026) / Teckelec power supply

Y=Z=0mm

Measurement @ I=49.3A

R (mm)	Field By value (G)
-200	287.15
-100	145.45
0	0.5847
100	-143.56
200	-282.29

Expected values (from simulation performed with Q3 yoke and considering 20% less field)

R (mm)	Field By value (G)
-200	258
-100	129
0	0
100	-129
200	-258