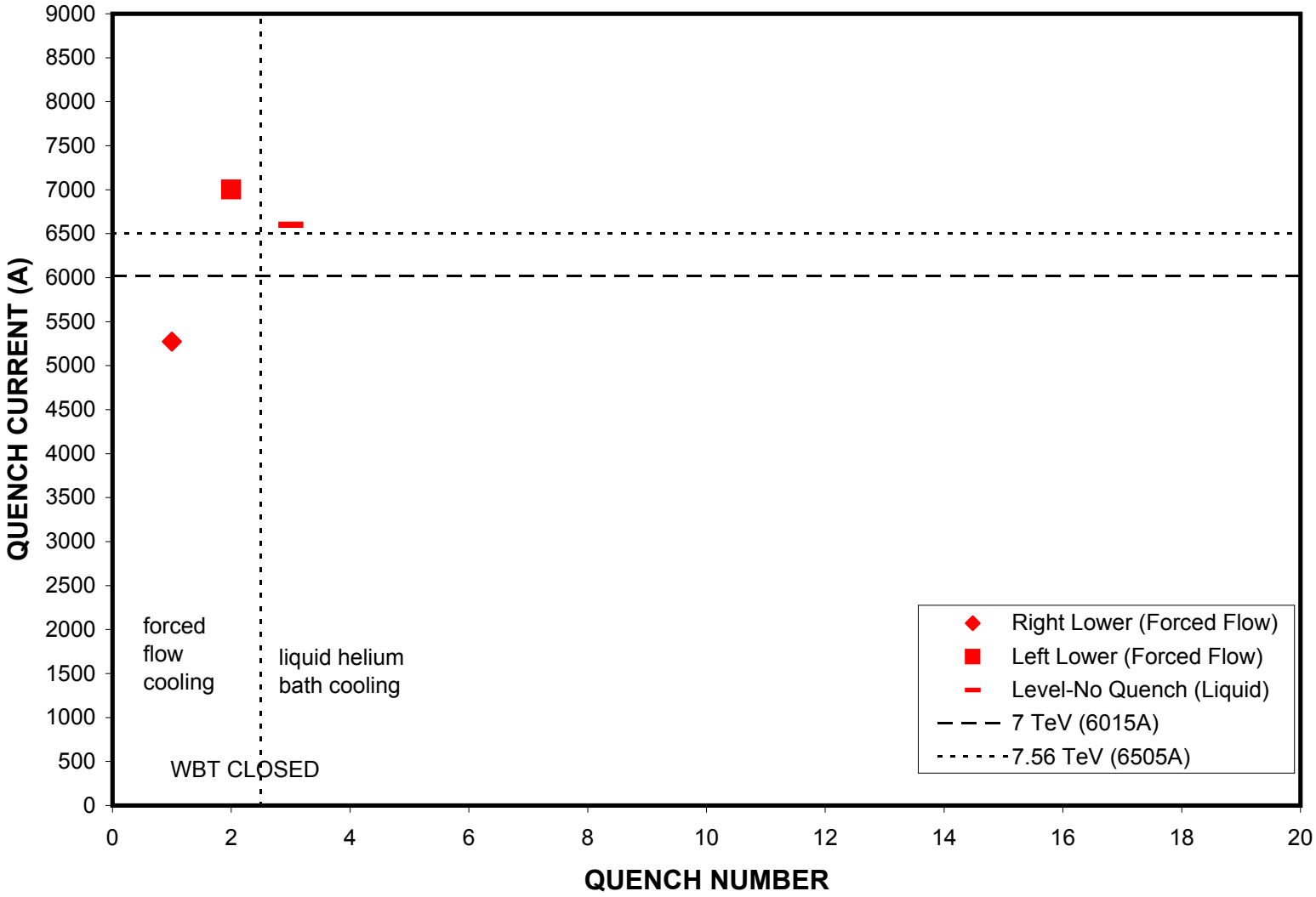
D2L106 QUENCH TESTS



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D2L106 QUENCH SUMMARY

Magcool Bay C

QUENCH #	RUN #	CURRENT (A)	T1 (K)	T3 (K)	START (ms)	MIITS	COIL	COMMENTS
T = 4.5K (nom)								
Warm bore tubes installed, sealed, and under vacuum								
Forced flow cooling @ 12atm								
1	16	5274	4.604	5.072	-86	10.0	lower right	
2	17	7002	4.640	5.132	-22	9.7	lower left	
Warm bore tubes open								
Forced flow cooling @ 12atm								
Magnetic field measurements to 6400A with no quenches								
Liquid helium bath cooling @ 1.4atm								
Warm bore tubes sealed and under vacuum								
	61	6600	4.619	4.610	reached level, for 1 hr; no quench			

Notes:
a) Ramp rate for quenches was 20A/s.
b) Energy extraction used: 35mohms for all quenches.
c) The temperature T1 is a diode sensor located in the helium return line tube which contains the superconducting bus; T3 is in the lower lead interconnect pot. Both have associated redundant sensors.
d) There were no auxiliary voltage taps in the magnet coils.
e) Data acquisition sampling rate was 1kHz for all quenches.
f) Strip heaters were fired at 475V (nom) and 96A (nom), with 1ms delay.
g) Voltage spikes were seen on the voltage difference signal for quench #2.
h) For quench #1 the voltage difference quench detector threshold voltage was set at 1.6V. For all other quenches the setting was 0.6V.