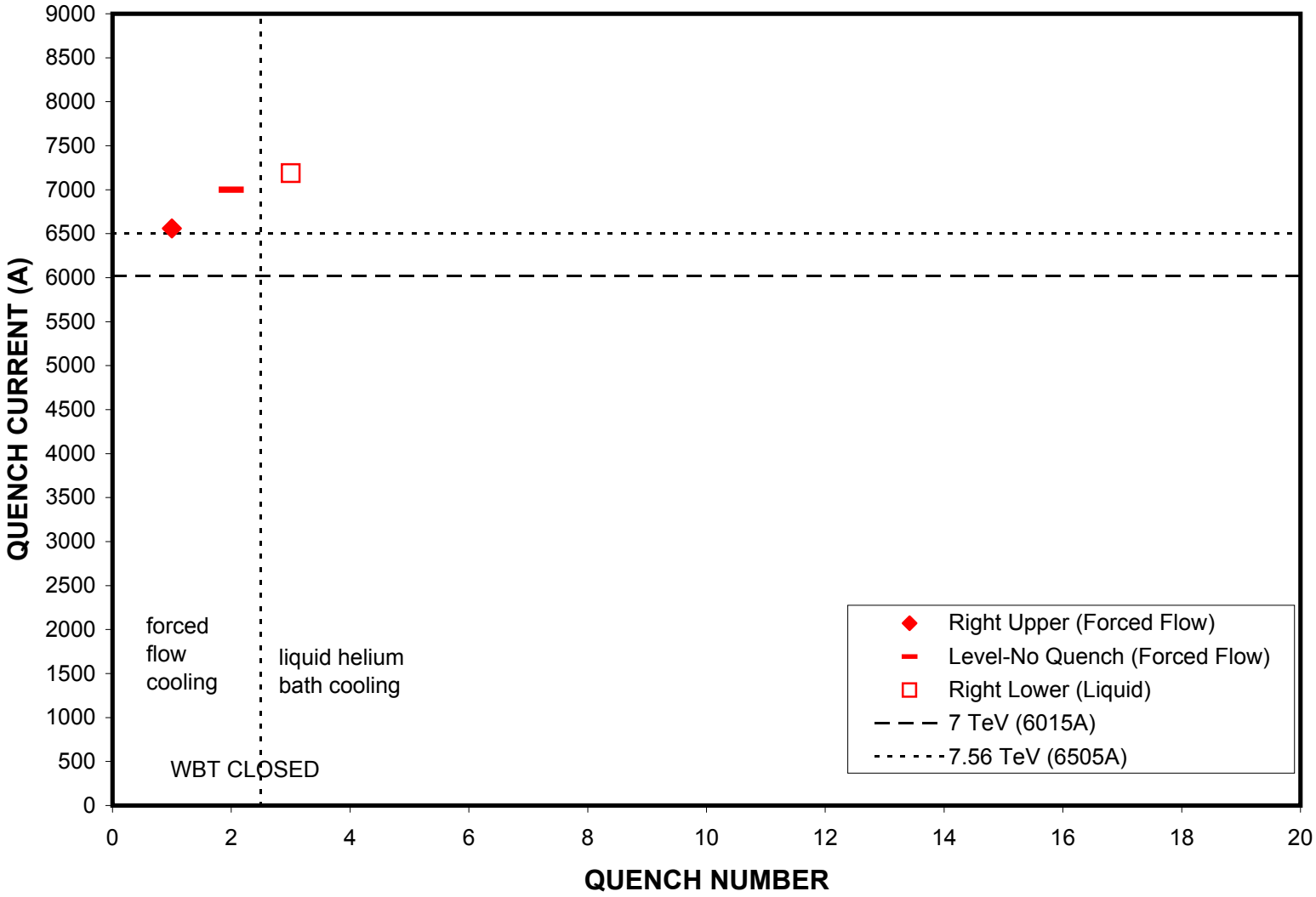
D2L107 QUENCH TESTS



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D2L107 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	19	6559	4.602	5.170	-28	9.2	upper right	
	20	7000	4.573	5.199	ramp to 7000A; NO QUENCH			
Liquid helium bath cooling @ 1.4atm								
Warm bore tubes sealed and under vacuum								
2	21	7187	4.572	4.568	-14	8.8	lower right	
Forced flow cooling @ 12atm								
Warm bore tubes open								
Magnetic field measurements to 6400A with no quenches								

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 all quenches, the voltage difference quench detector threshold voltage was set at 0.6V.
i) For quench #2, there was a voltage spike at the quench start. Also, spikes appeared at other times before the quench.