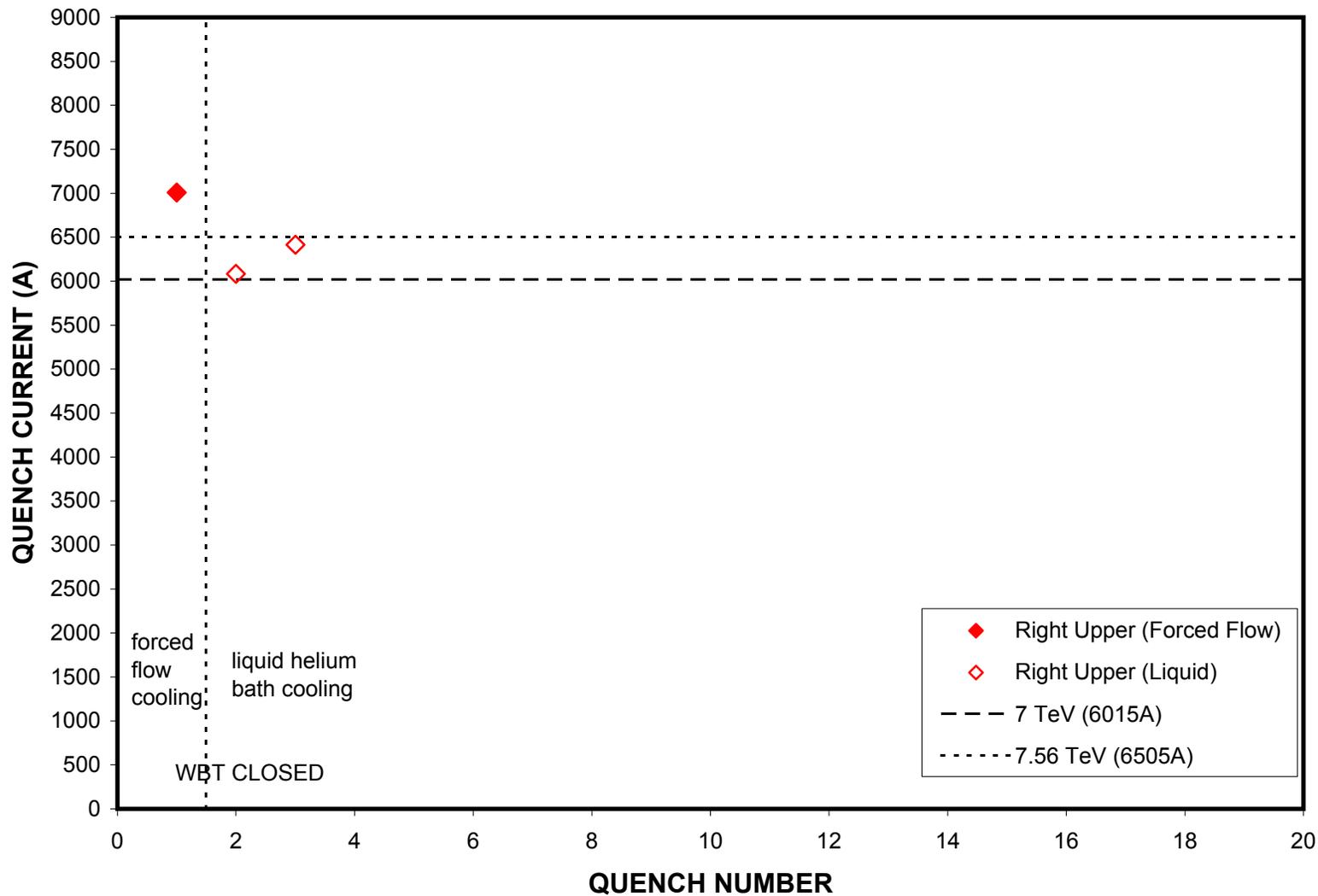


# D2L105 QUENCH TESTS



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D2L105 QUENCH SUMMARY

Magcool Bay C

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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	25	7009	4.473	4.973	-13	9.5	upper right	
Liquid helium bath cooling @ 1.4atm								
Warm bore tubes still sealed and under vacuum								
2	26	6082	4.542	4.573	-25	8.8	upper right	(i)
3	27	6414	4.533	4.562	-17	8.7	upper right	(i)
Warm bore tubes open								
Forced flow cooling @ 12atm								
Magnetic field measurements to 6400A with no quenches								

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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 signals for all quenches
- h) The voltage difference quench detector threshold voltage was set at 0.6V .
- i) For Quenches #2 #3, the upper left coil also quenched, at +56ms.