

# Cryogenic Summary - Testing D1L104 in MAGCOOL

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- Test Configuration for D1L104
- Tests Performed
- Summary

# Test Configuration for D1L104

- Warm bore tube not installed

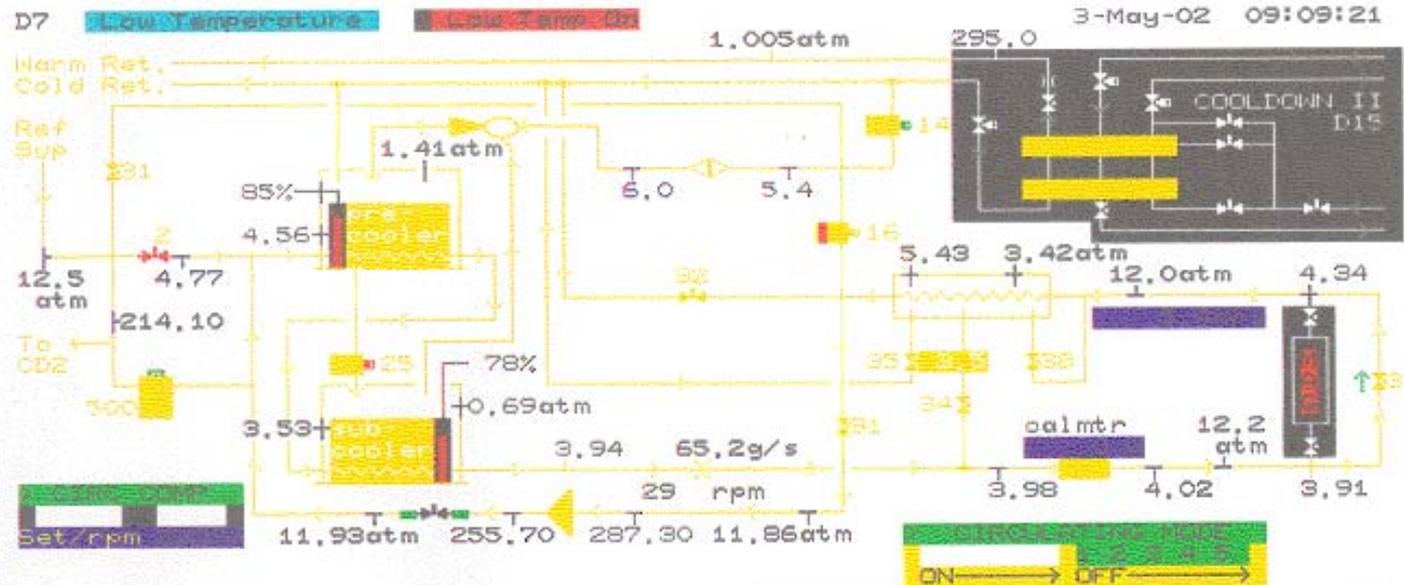
# Operation Summary

- 4/30 - 5/1 Initial cooldown, 300 –100 K,  
100 – 4.5 K
- 5/2 No test due to power supply trouble
- 5/3 Test (1000A, 6122A, 6814A,  
7000A)
- 5/4 4000A shut off - strip heater  
unable to quench the magnet
- 5/8 – 10 Cooldown to 4.5 K  
4000 A strip heater quench – 3 times

# Main Results

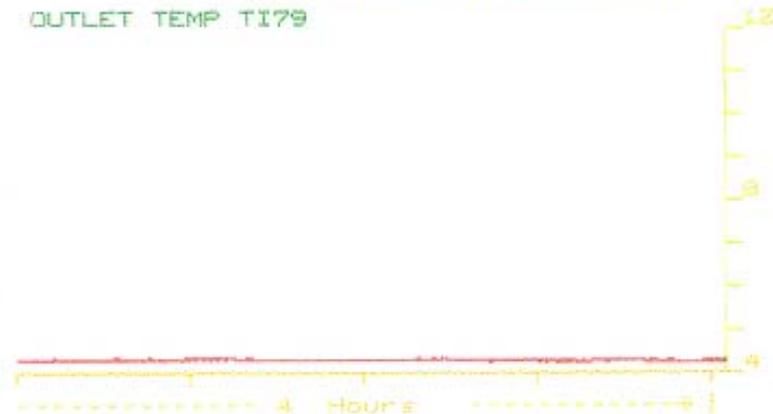
- Good quench result
- Ramp to 7000A and down
- The cryogenic system works smoothly

# Operating condition for D1L104 (0.1 g/s flow through each lead)

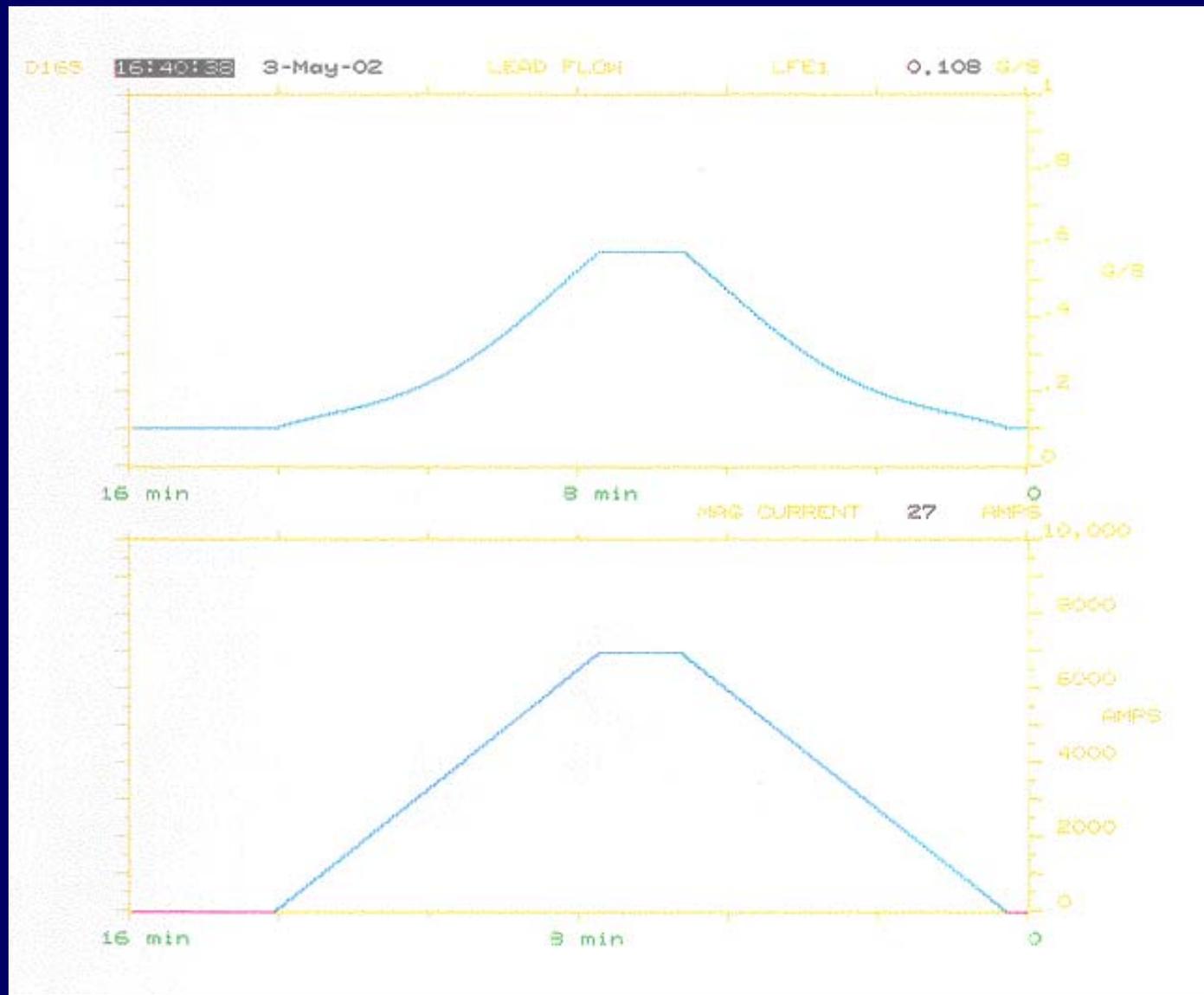


Circ. Loop Makeup ADV300	Subcool Level ADV25	Bypass 3.7 ADV14
25	14	12
20.4 p r e a s u r e a t m	100% l e v e l %	20.4 p r e a s u r e a t m
11.93	78.1	12.5
5.0	75.0	12.5
PS-- 150	PS-- 100	PS-- 150
RS-- 10.0	RS-- 2.0	RS-- 10.0
RT-- 0.0	RT-- 0.1	RT-- 0.0

OUTLET TEMP TI79



# Lead Flow and Current - Ramp to 7000A and down



## Precooling 7500 A Lead

- With Tare flow set at 0.1 g/s, no lead cooling is needed
- No problem during ramp up and down

# Summary

- Complete test D1L104 as plan
- Cryogenic characteristic same as previous D1