

Polarized ^3He Target Lab Status

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Cell Status

Cell (40cm)	Brunhilde	Exodus	Duke
NMR Polarization	$(47.4 \pm 1.9)\%$	$(43.7 \pm 1.8)\%$	$(44.5 \pm 1.7)\%$
EPR Polarization	$(47.3 \pm 1.6)\%$	$(42.5 \pm 1.2)\%$	$(46.4 \pm 1.9)\%$
Lifetime (hours)	43.0 ± 1.8	46.9 ± 1.6	51.4 ± 1.7
Density (amagats)	8.66	9.37	9.18

Note: Wall thickness measurements exist for all three cells. Density measurements only exist for Brunhilde and Duke. Exodus is at UVa being characterized now.

Equipment Status

- Coherent 2 diode needs replacement
- Kepco 3 fan replaced
- New oven pipes with bellows
 - Before heating oven vernier at 0.86"
 - At 170° C vernier at 0.76"
 - Change in vernier ~ 0.01 " or 0.254 mm

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Future Work

Target Work:

- Lifetime and AFP loss tests on different parts of the cell
- Test cells
- Ramp H0 from 32 G to 25 G
- Test new pick-up coils and ladder assembly
- Map H0 field in target lab
- Begin target installation in Hall A (Nov. 12th)

Detector Check Out:

- Calibrate gas cherenkov both arms
- Calibrate shower and pion rejector
- Study PID efficiency