

SANE Short Term Run Plan –Mon. 2/9 eve – Tue. 2/10 owl/day/eve

RUN PLAN (SAVE previous run plans in the Run Plans binder)

Mon. 2/8 owl to whenever the next anneal happens (expect it to be Tue. 2/10 eve shift).
Opportunistic accesses: when switching targets or to delay or move up anneal times to avoid annealing between midnight and 6:00 AM. Keep < 30 min. long if possible.

BEAM (for production runs):

Current : **85 nA**

- **check that the SR is ON** and configured with *New Settings for 5.9 GeV Beam* as explained in hlog entry **175431 (20 mm diameter)** spiral: 1.6 V; circles 1 & 2: 1.5 V
- **fast raster 1 x 1 mm,**
beam at **x = -2.5, y = 0.0 mm on BPM 3H00A;**
x = -3.3, y = 0.5 mm on BPM 3H00B
- Enter all required variables in the on-line Run Sheets, including the target polarization at the beginning and end of each run

DATA:

- Find the cross hairs on the empty target. Check that they are centered in the raster ADC plot. Move the target encoder as needed. There should be little or no need to move the beam in the horizontal direction (limit beam horizontal movement to +/- 0.3 mm of above settings), no change in the vertical.
- If after centering the target the rim of the target cup is visible on the raster plot try to adjust the slow raster voltages to fit the raster entirely in cup (about 19 mm diameter) by scaling the three preset Wavetek voltages by the same factor of about 0.95. Log the new settings. (instructions on adjusting the Wavetek voltages are on the wiki under “Beamline”, “Slow Raster”)
- HMS: should be set at central momentum to 3.1 GeV/c, 15.4°, electrons ($Q^2 = 1.3 \text{ GeV}^2$, $W = 2.2 \text{ GeV}$) for packing fraction.
- Take data with the BOTTOM target with POSITIVE polarization. 85 nA.

- Take 1 h long runs. Take one run after polarization drops below $P_{\min} \sim 60\%$. Calculate how long the target polarization lasted above P_{\min} : _____ h.
- Ask MCC to turn the beam off, ask the TO put the TOP target in the beam, POSITIVE polarization. Wait for $\sim 70\%$ polarization before asking for 85 nA
- Continue with 1 h runs until the Moller run at 1:00 PM. Put the Empty target in the beam during Moller
- After Moller continue with NH3 runs until $P < 60\%$, anneal.

ANNEAL

1. Target experts will conduct the anneal.
2. Put the C target in beam to help boiling off He in the nose. **IMPORTANT:** Take a $\frac{1}{2}$ h run *AFTER the nose is empty. Watch the HMS or BigCal rates: the nose will be empty when the rates stop changing after dropping, start a new run then.*
3. Target experts will finish the anneal.
4. Once the anneal is complete and there is LHe in the nose, take a $\frac{1}{2}$ h run with the EMPTY target, and another $\frac{1}{2}$ h run on C+He, but only if it was not done before the anneal, as explained above.