

**SANE Short Term Run Plan –Mon. 2/16 eve – Tue. 2/17 owl/day**

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

Mon. 2/15 eve to Tue. 2/16 day. Opportunistic accesses: when switching targets, during anneals (check with the target experts) or to delay or move up anneal times to avoid annealing between midnight and 6:00 AM. Keep < 30 min. long if possible.

SPECIAL ITEMS: Tue. 2/17 DAY *will ramp magnet down to re-insert the forward tracker and add an iron shield for the cherenkov.* May change target material when work on pivot is done (including NMR tuning, magnet ramp back up, and TE calibrations into EVE shift).

BEAM (for production runs):

Current : start with **85 nA**

- check that the **SR is ON** and configured with *New Settings for 5.9 GeV Beam* as explained in hclg entry **175618 (20 mm dia.)** spiral: 1.37 V; circles 1 & 2: 1.28 V
- **fast raster 1 x 1 mm**  
beam at  $x = -0.0$ ,  $y = -0.66$  mm on **BPM 3H00A**;  
 $x = -0.5$ ,  $y = -0.3$  mm on **BPM 3H00B** (per hclg 175661)
- Enter all required variables in the on-line Run Sheets, including the target polarization at the beginning and end of each run

DATA:

HMS: should be set at central momentum to 4.17 GeV/c, 22°, protons for *ep* elastics.

- Check target and beam centering with cross hairs target. Take a short run (<10 min) and look at the slow raster ADC plot. The cross hairs should look reasonably centered (within 1 mm) in the vertical and horizontal, and the rim of the cup should not be visible at the edges of the raster. Use target encoder values of hclg **175960**.
- If beam centering is needed, follow run plan for 2/13/09, in the binder and on the wiki. Don't steer the beam more than +/- 0.5 mm from above positions.
- Take data with the BOTTOM target with **POSITIVE** polarization. Watch the polarization rate of increase. Wait up to 30 min. from the start of polarizing:
  - If it takes (or took) *more than 30 min to get to 50%*, it probably is over annealed. Ask for **100 nA** and start taking data, continue for up to 4 h total time.
  - If the polarization rises *above 60% in  $\leq 30$  min*, ask for **85 nA** when  $P \sim 70\%$ , take  $\sim 1$  h long runs. Continue with 1 h runs until the polarization is at  $\sim 0.75$  of its maximum value. Watch the rate of polarization decay: if it exceeds more than  $\sim 5\%/h$  (absolute) stay at 85 nA. After the polarization drops below  $\sim 70\%$ , ask for 95 nA.

- Take data with the TOP target with **POSITIVE** polarization, ask for **85 nA** when P ~ 70%, until 5:00 AM.
- **TO:** Do TE's on both cups. Follow specific instructions from the target experts.
- After TE's are done, magnet will be ramped down