

## SANE Short Term Run Plan –Sun. 2/22 day/eve – Mon. 2/23 owl

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

Sun. 2/22 day to Mon. 2/23 owl. 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.

BEAM (for production runs):

Current : **95 nA**

- **check that the SR is ON** and configured with *New Settings for 5.9 GeV Beam* as explained in hlog entry **175618 (20 mm dia.)** spiral: 1.37 V; circles 1 & 2: 1.28 V
- **fast raster 1 x 1 mm**  
beam at  $x = -1.0$ ,  $y = -0.66$  mm on BPM 3H00A;  
 $x = -1.5$ ,  $y = -0.3$  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:

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

- Check target and beam centering. Take a short run (<10 min) at about 60 nA and look at the slow raster ADC plot. No indications of the cup walls should be visible at the edges of the raster. Use target encoder values of hlog **176791**.
- 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.*
- *Make sure all detectors are ON, LED's off and retracted, prescale factors and trigger type correct, etc. before starting*
- 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 can use some beam. Ask for **110 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 **95 nA**, take ~1 h long runs. Continue with 1 h runs until the polarization is at ~ 0.75 of its maximum value.
  - If the polarization rises quickly but it does not get significantly above 70%, and it starts dropping as soon as beam is turned on, it probably is under annealed: take data at **85 nA**.

- Take data with the TOP target with **POSITIVE** polarization, **95 nA**, until polarization is at ~ 0.75 of its maximum value. The current vs polarization criteria for the BOTTOM target also apply to the top.

#### ANNEAL

1. Target experts will conduct the anneal.
2. Put the C target in beam to help boiling off He in the nose. Ask for **150 nA**. Take data until 15 min. after the nose is empty of He.
3. Target experts will finish the anneal.
4. Continue with NH<sub>3</sub> production data.