SANE Short Term Run Plan –Wed. 2/18 eve – Thur. 2/19 owl/day

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

Wed. 2/18 eve to Thur. 2/19 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.

FIRST: Finish target TE calibrations and anneal

BEAM (for production runs):
Current : start with **95 nA**

- check that the **SR is ON** and configured with *New Settings for 5.9 GeV Beam* as explained in hclog 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 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 hclog **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 **110 nA** and start taking data, continue for up to 4 h total time.
- If the polarization rises *above 60% in ≤ 30 min*, ask for **95 nA** when P ~ 70%. **T**ake 1 h long runs until P ~ 0.75 of its maximum.
- Watch the rate of polarization decay: if the polarization drop rate exceeds more than ~ 6%/h (absolute) at 95 nA *but the microwaves are being properly tuned and the nose level is good (>70%)* then *reduce* the current to 85 nA. When the polarization drops below ~ 75%, ask for 95 nA.

- Take data with the TOP target with **NEGATIVE** polarization. Start polarizing and ask

for **95 nA** when P ~70%. Take 1 h long runs until P ~ 0.75 of the maximum polarization**.**

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 **<u>150 nA.</u>** The HMS is set for protons so it is not necessary to take HMS data.

3. Target experts will finish the anneal. Continue with NH3 production data. No need to take EMPTY or C+He runs.

MOLLER:

Sometime when Hall A is at 4 passes we need to do a Moller measurement

HMS: during pass change should be set at central momentum 3.1 GeV/c, 15.4°, electrons (Q^2 = 1.3 GeV^2, W = 2.2 GeV).