2007-10-31 Morning Summary

Wednesday, October 31, 2007
7:30 AM

- **Summary**
  - By 5:45am on Tuesday, we transferred and then stacked and held onto pbars for the entire day shift awaiting the HEP shot. Recycler already had 260e10+.
  - We didn't transfer to Recycler until 21:54, and even then it was a partial transfer since the Tevatron quenched during the evening shift shot setup and the Run Co only wanted 100e10 in the Recycler for the owl shift shot.. The Accumulator started with 175mA and ended with 118mA. Recycler started at 52 and ended with 100mA.
  - After that it was back to normal iterations of stack to 50mA and transfer
- **Stacking Numbers**:
  - Stacked 245.3e10 from 7:30am until 7:30am.
  - Ran 8 Booster turns with 5.9e12 to 6.2e12 on target.
  - Productions were 14-17s with 2.4 second cycle time, and low 20s with a 4.4 second cycle time.
  - Stack rates were 10-12mA/hr with the larger stack sizes. Overnight stack rates were in the 13-15mA/hr range as a result of the more normal stack sizes.
- **Transfers**:
  - Sent 236.61e10 to the Recycler in 13 transfers over three sets.
  - Efficiency averaged only 74 percent
    - Two transfers from large stacks
    - Emittance blowup from 1.2pi to 3pi on transfer 6511, which was the transfer from 146e10.
- **Studies**:
  - Tuned on stacking during the day shift.
  - Destructive D/A studies on the evening shift (http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar07&action=view&page=375&scroll=false&load=)
    - Transverse Bands 3 and 4 aren't doing much
    - Beam has uniform structure in all three planes….would expect a gaussian distribution in the transverse planes.