

# Accelerator Status Report

Run Schedule: April 23, 2009 to June 14, 2009

May 6, 2009

## Injector

- Injector energy 66.40 MeV
- Wien angle: 76.8 degrees
- Injector was not stable. Beam was having a slow drift. Most likely the drift was caused by the GUN anode grounding. The problem was fixed. The symptoms were high attenuator settings, high interceptions, and 0R03 and 0R04 BLM trips.
- Ops identified and documented the problems, tried to resolve the issue.
- QE scans indicate that the wafer has deteriorated.
- The injector transmission indicator is not reliable. The EGG is aware of it.
- Day shift (5/6) started with inject experts working on the wafer due to low QE. The injector work will take about eight hours.

## Accelerator

- LINPAC Setup 590.20 Me
- Pass setup: 3/5/5
- Optics is very stable.
- Arc4 box supply tripped several times and EES fixed the problem by replacing the transistor interface board.
- 1L06 insulating vacuum pump tripped off. The power cord was replaced the pump was turned back on.
- Yesterday was a beam studies day. It went well.
- RF trip rate is lower than 10/h.
- Hall B dipole was not stable due to a failing Silicon-Controlled Rectifier (SCR). The faulty SCR was replaced.
- At the end of swing shift last night (5/5), the CHL and box supplies went down most likely due to lightning strikes or a power glitch. The owl shift was spent recovering the CHL, magnets and RF.
- The machine was successfully restored at 5.9 GeV. Then it was scaled to 5.968 GeV.
- Optics is good and stable
- Injector power meter sometimes gets stuck. It can be reset from the in service building.
- Q Measurement test plan running parasitically.
- 1L06 insulating vacuum pump was replaced due to a bad power cord.
- RF issues.
- ARC4 box supply has a DC overload fault.

## Hall A

E05-015/E08-005 3.067GeV 3 Pass

- Hall A was changed from 1-pass to 3-pass.
- Beam goes through the Compton. Compton noise is low with the slit fully extracted.
- There is a viewer attached to the Compton electron detector. The viewer is not GUN-mode interlocked, which is not safe. The hall has a full control over it. Chime is in place

to put the FCup2 in if the viewer moves into the beam line. The software will be modified to have it GUN-mode interlocked.

- The hall will have a pass change sometime this week.
- Hall a beam was fine.
- Hall A SmartKnob: primary and secondary quads were re-labeled.

## Hall B

Eg1-DVCS 5.968 GeV 5 Pass

- nA BPMs 2C21A and 2C24A were calibrated and have been working well. BPM 2H01 is not calibrated because 2H00 harp does not work well.
- Hall B up-stream halo counts are FSD interlocked now.
- Hall B nA BPMs have problems indicating beam.
- The up-stream halo counts will be FSD interlocked.

## Hall C

- The hall is not scheduled to run.