



2004 Shutdown Update Weeks 8 and 9

G. Ginther

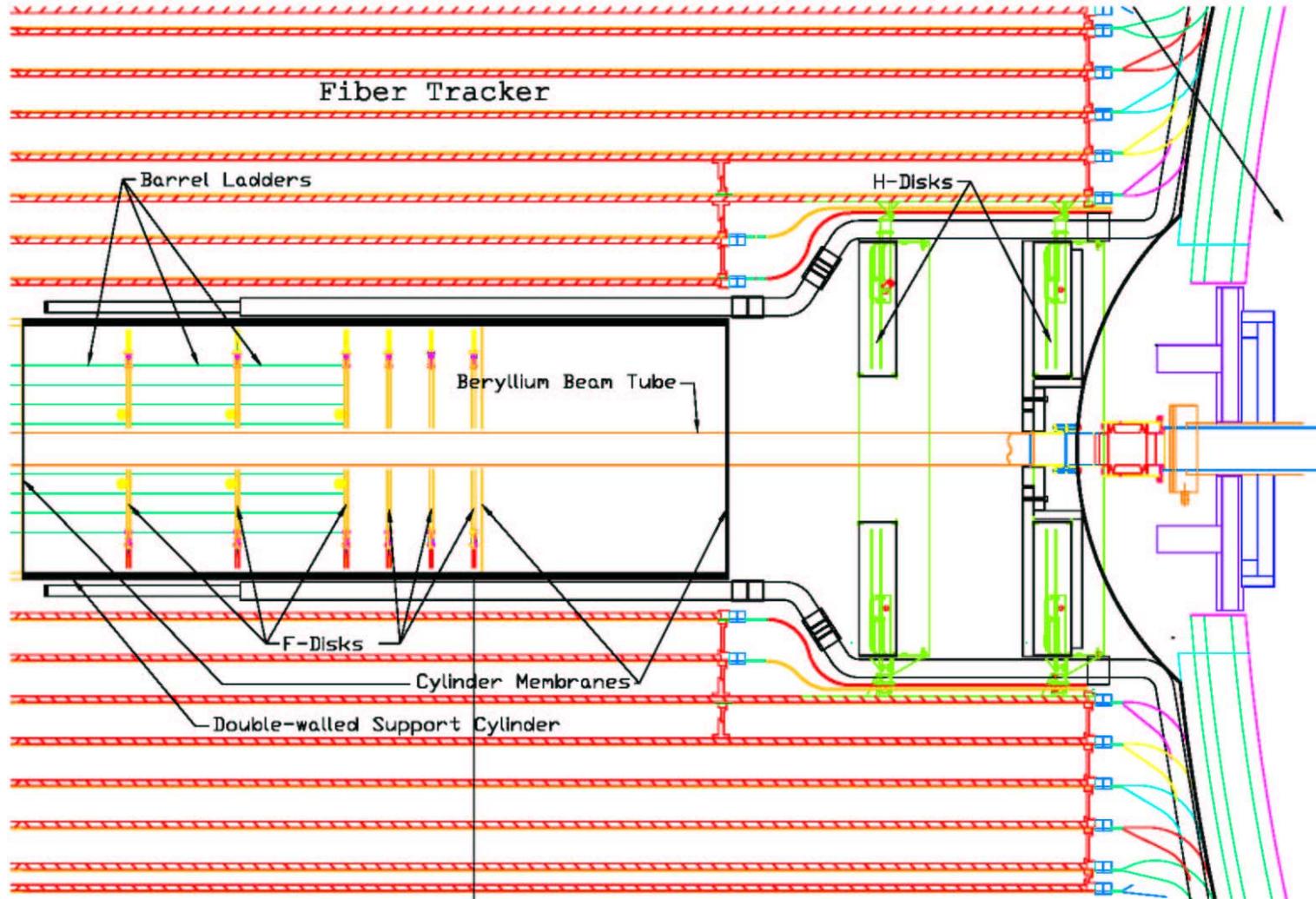
On behalf of the D0 Collaboration

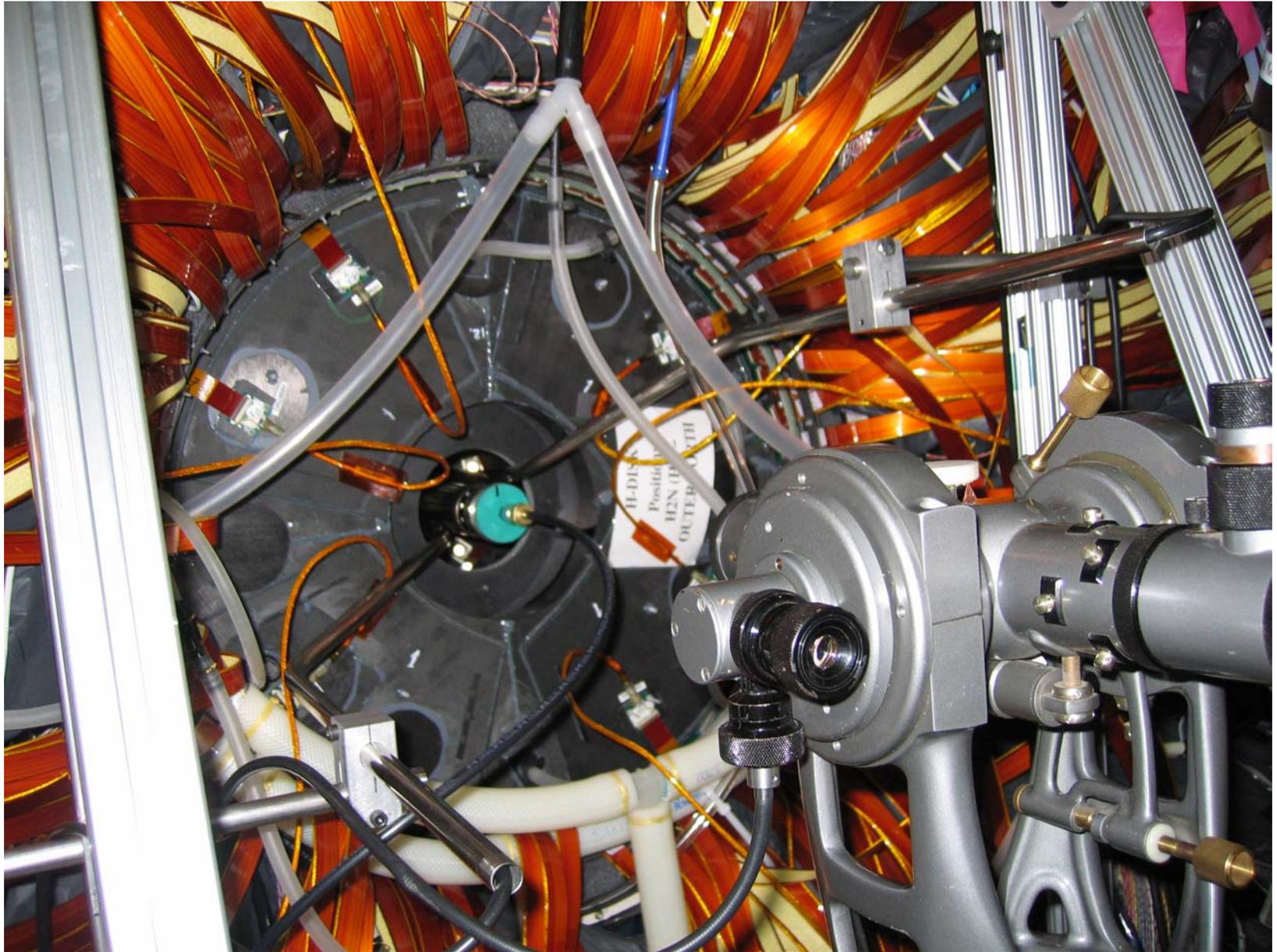
25-October-2004

Week 8

- Breaker maintenance on Monday October 11
 - Maintenance of emergency power deferred to minimize risk while membrane isolating SMT is down
- Prep for Layer 0 aperture survey remainder of week
 - Disconnect Be beampipe joints and install purges on Be and EC beampipes
 - ES&H performed wipes of Be beampipe
 - Install support structures for survey equipment

Tracker Region





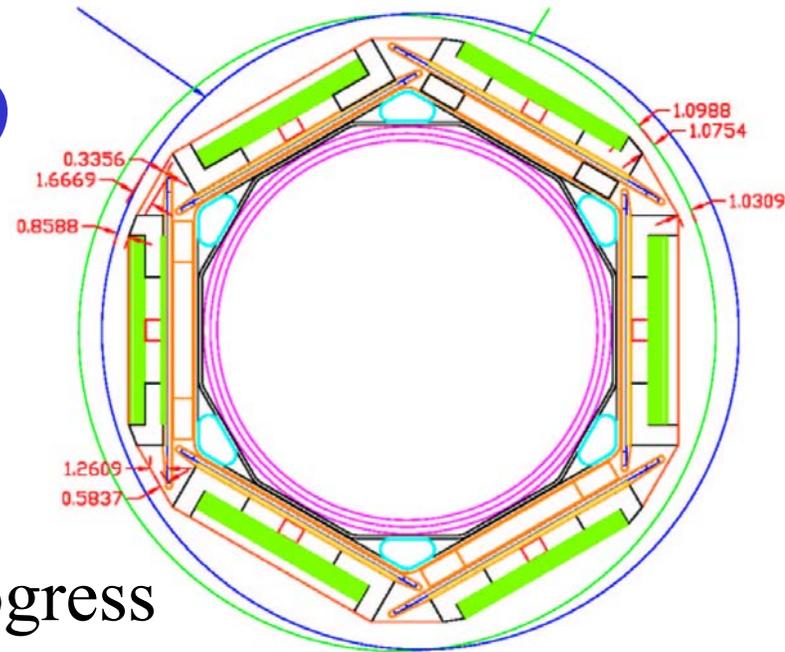
25-Oct-2004

G. Ginther

4

Week 9

- Layer 0 Aperture Survey
 - Install survey equipment
 - Perform survey
 - Evaluation of results in progress
- Modifications to SMT sequencers complete
 - Reduced deadtime
 - Enhanced readout flexibility
 - May allow recovery of some partially functional HDIs
 - Full system tests deferred until detector coolant is available again



Ongoing Activities

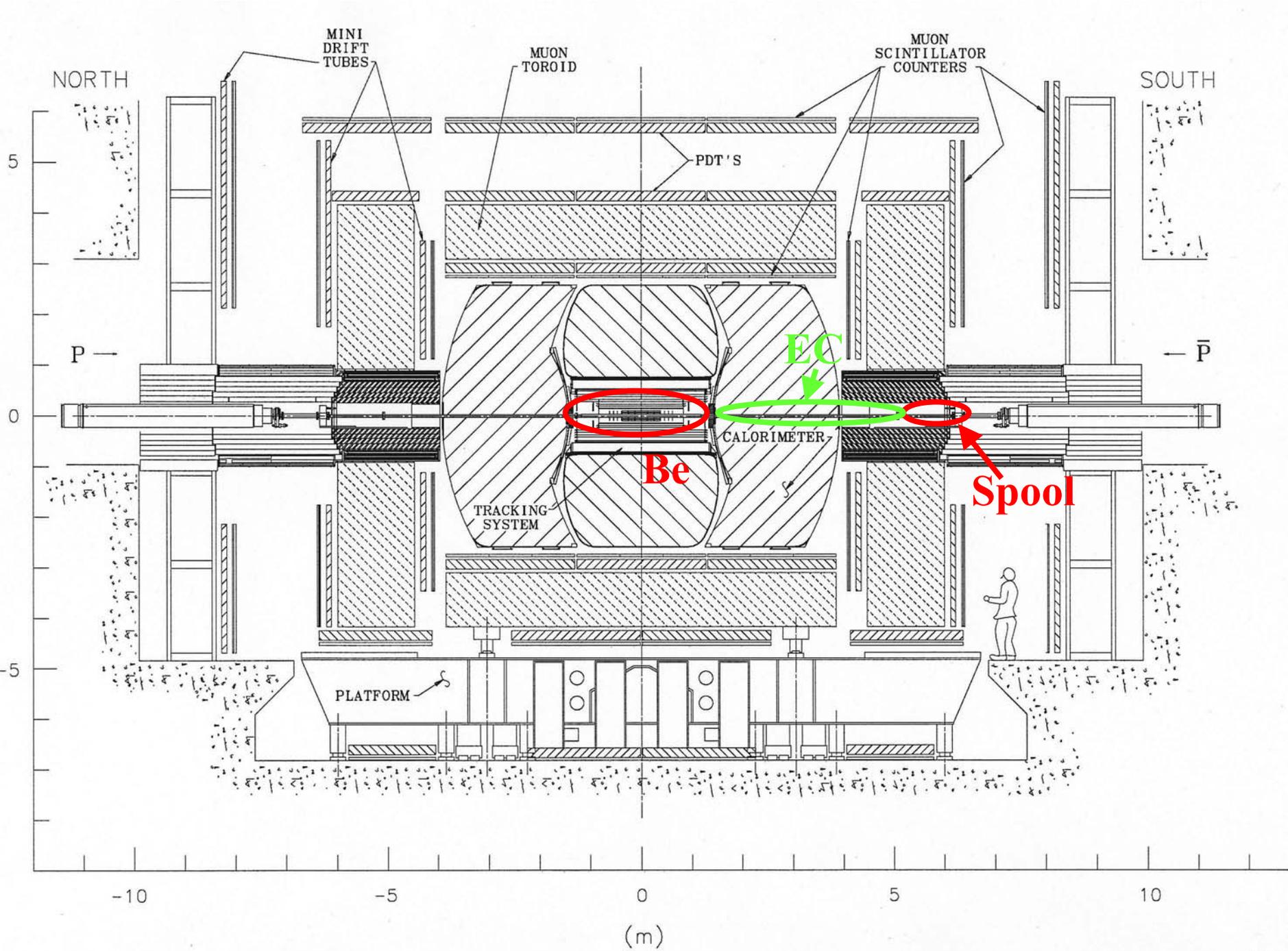
- Continue studies aimed at optimizing readout rate
- Continue routine maintenance and upgrades
 - Power supplies
 - Recoveries of individual channels
 - Including disabled HDIs
 - Upgrades to DAQ/controls
 - Infrastructure modifications intended to accommodate Run IIb upgrades
- PDT noise studies
- Monitor status of unresponsive VLPCs
- Routinely exercise all readout systems in anticipation of collisions

Credits

- Progress made possible due to efforts from within D0 collaboration and department combined with support from several other parts of the lab
- Thanks for assistance with Layer 0 Aperture survey
 - Accelerator Division
 - Morgan Carter, Scott McCormick, Mike McGee
 - Particle Physics Division
 - Dave Butler, Ron Davis, Patrick Donahoe, Kurt Krempetz, Eric McHugh, Yuri Orlov, Mike Roman, Chuck Wilson, and DZero Operations led by Russ Rucinski
- Thanks for assistance with sequencer modifications
 - Particle Physics Division
 - Electrical Engineering Dept, Jill Calderon and Paula Lippert

The next two weeks...

- Recovery from Layer 0 Aperture Survey
 - Remove survey equipment
 - Re-establish beam pipe connections
 - Including installation of spool pipes scheduled for this Thursday
 - AD wants to install SNEG pipes
 - Leak checking during week 11
 - Re-install membrane and cooldown silicon once beam pipe activity is complete
 - Perform system tests on silicon
- Cooldown solenoid
- Continue preparations for end of shutdown



Updated 23-Oct-04								
Week #		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6	26-Sep		Open and secure both EC gaps Leak check East VLPC cassette space Final Pump and Purge	begin east VLPC cryostat cooldown		East VLPC cryostat at operating temp	Begin silicon warm-up East cryostat at operating temperature	
7	3-Oct	raise silicon coolant temp to 15C	Adjust dewpoint interlock for SMT	Open tracker membrane ES&H wipes Inspect beam pipe mounts Start fixing solenoid lead Ghe leak	Prepare mounts for L0 survey table	More prep of supports for L0 survey Results back from ES&H Remove foam from tracking region	Prepare beam pipe purge lines, caps Remove bellows protectors Complete repair of Solenoid lead flow leaks Outer H disk cable repairs	Outer H disk cable repairs
8	10-Oct	Outer H disk cable repairs	power outage 0800 to 1200 for local feeder 45 maintenance Remove TLD and foils Cal HV acoustic noise studies	Disconnect Be beam pipe install purge bags remove beam pipe support at H disk ES&H wipes Remove gap hardware Close EC	Remove EC to quad BP supports Install purge caps on EC pipes Open EC Install gap hardware	Install survey table in gaps	Finish installation of survey equipment	
9	17-Oct		Setup survey equipment for L0 Aperture	Survey L0 Aperture	Survey L0 Aperture	Survey L0 Aperture	Survey L0 Aperture DRM coring in tunnel	
10	24-Oct		Remove survey equipment from gaps Install beam pipe supports, redress gaps L0 recabling	Redress cables and waveguides in gaps Prepare beam pipes and gaps for closing	Install purge bags on beam pipe ends remove gap hardware close EC and EF	Install beam pipe spools Purge bag beam pipe joints and open EF irons	Open EC Install gap hardware Connect Be pipe to EC pipe Start pump down of beam pipe	
11	31-Oct		Leak check beam pipe joints	leak check beam pipe joints	Install TLD, foam, test H disks and install tedlar membranes Emergency power maintenance If necessary close EC for outer joint access SMT gap access begins this evening	begin SMT cooldown SMT gap access Leak check beam pipe joints	SMT gap access Leak check contingency	
12	7-Nov		SMT gap access Solenoid cold Leak check contingency	SMT gap access	Detector Clean-up Remove hardware Close both EC gaps S&S at 1800	Post-closing Survey EC#4871 Detector clean up and Checkout	Post-closing Survey EC #4871 Detector clean up and Checkout Install BLMs	Search and Secure collision hall Detector Checkout
13	14-Nov	Detector Checkout shutdown	Close CF and EF	Inspect/repair TeV curtains Replace shield block at pit door S&S Magnet powering tests Detector Checkout	Beam pipe bake-out Detector Checkout Centerbeam detector survey #4967	install veto counters on beam pipe Detector Checkout EC truss survey #4875	Detector Checkout Post-closing Survey #4874 EF, CF stick mike	Detector Checkout
14	21-Nov	over	Tevatron beam resumes			Lab Holiday		