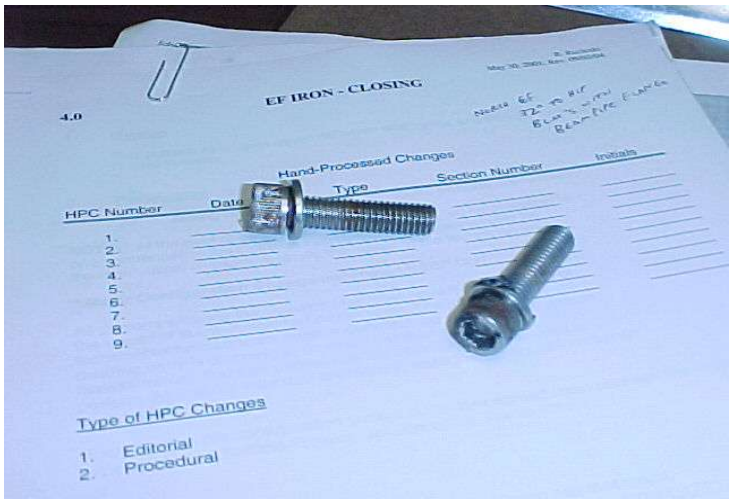
# Shutdown Status

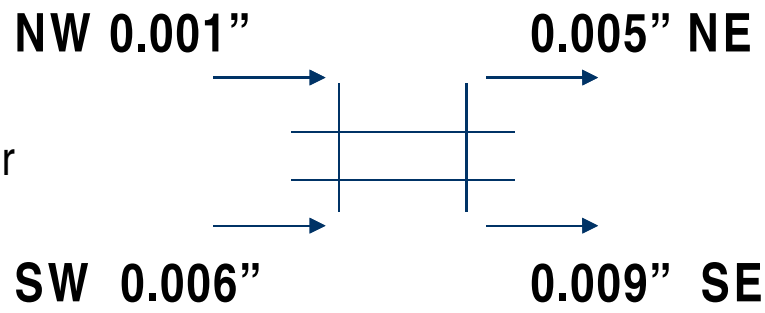
- General:
  - Remove beam-pipe to quads – **done**
  - Install backup power for the VLPC cryostats and cryo controls – **done**
  - Solenoid warmup for He leak repairs – **ongoing**
- Online: migrate Alpha cluster to Linux
  - NFS, DAQ / LUM, DB, Services – preparations done, beginning soon
- Controls: Epics upgrade to R3.14, VxWorks upgrade to 5.5, Comics upgrades
- Muon systems
  - South A-layer MDT broken wire work – **done**
  - PDT repairs and noise studies – **ongoing**
- Calorimeter
  - BLS power supply upgrades, Preamplifier power supply tests, LAr monitoring cable termination – **ongoing**
- Grounding problems elimination / noise studies – **done (!!)**

# Grounding Improvements

- Goals: **reduce noise in calorimeter, improve calorimeter performance, and reduce vulnerability to outside noise sources**
- **Found (and "fixed") about 20 grounding violations**
- Fixing platform transformer grounding fault already reduced rate of a special "noise" trigger from >1kHz to below 1Hz in the presence of welding activity early on
- Thursday Sep 9 – Tuesday Sep 21
  - Disconnected AC power to the detector
  - Removed safety ground
  - Used a high current power supply to energize the detector ground relative to the building earth ground
  - Raised the platform as necessary
- **Resistance of detector to ground is now ~1k$\Omega$, capacitance ~2$\mu$ F**

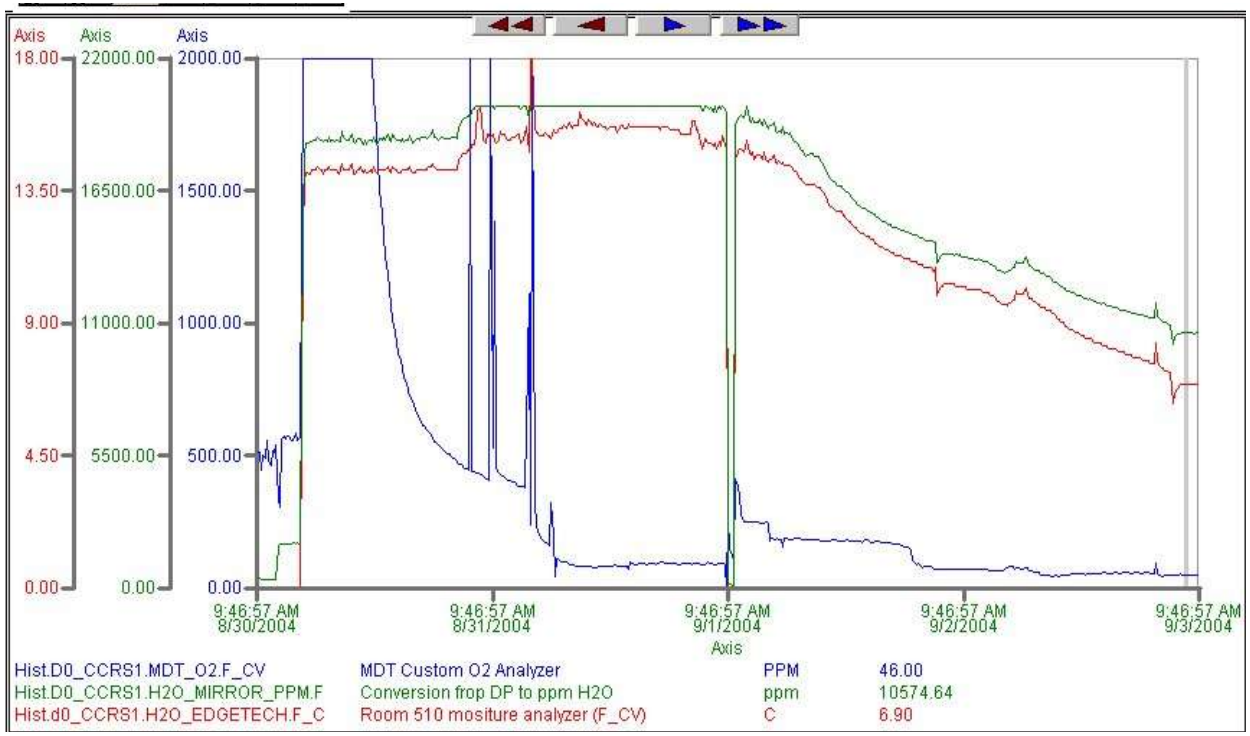


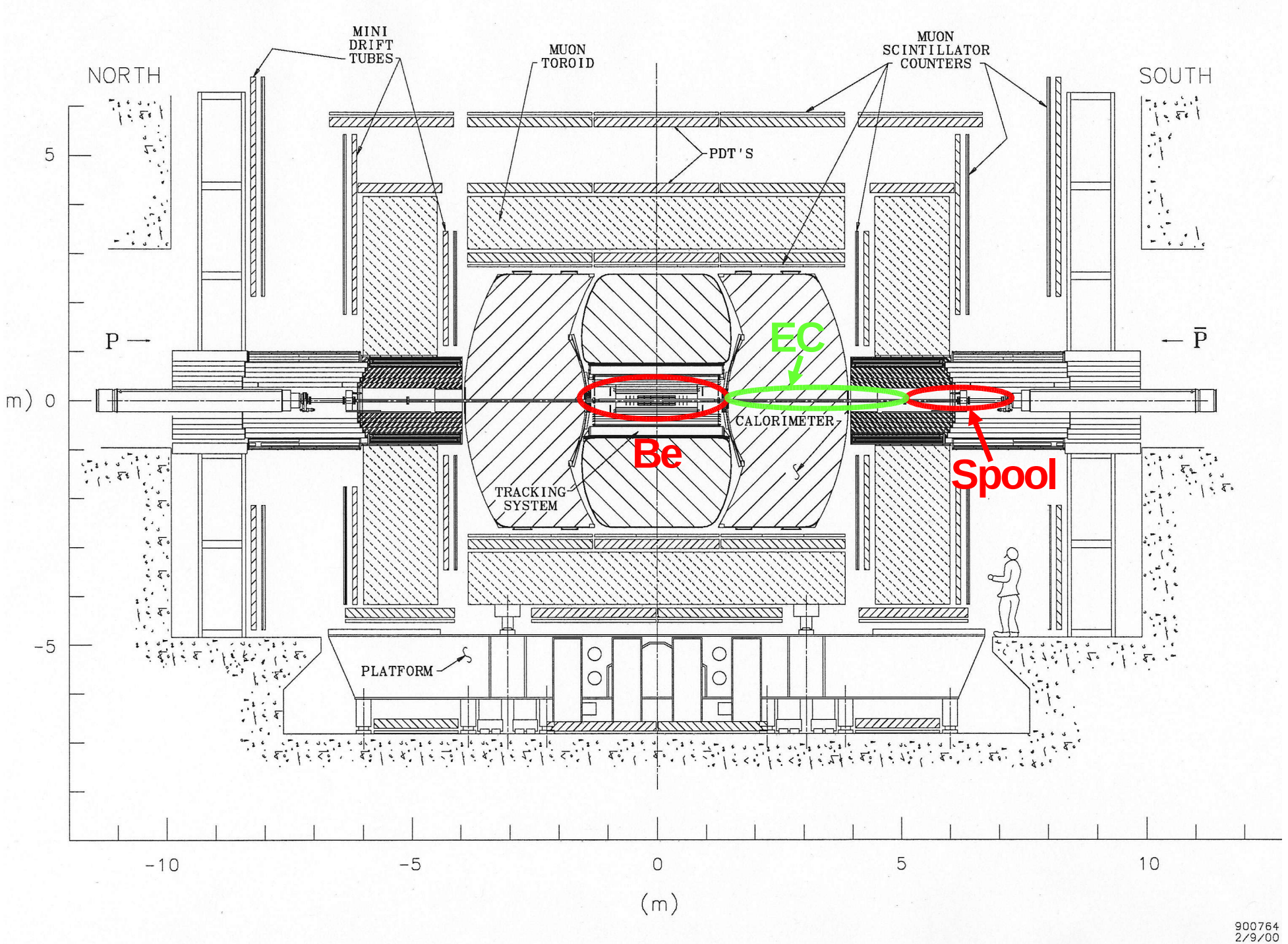

Repositioned detector close to previous location



# Shutdown Status

- Central Fiber Tracker / Preshower – Recovery of readout channels
  - ≃ 1.5% of CFT and CPS dead (480 CFT axial dead channels) since October 2003 (x20 increase). Likely explanation: water contamination
  - **VLPC cryostats warmup, drying etc – ongoing**
    - East VLPC cryostat at room temperature. Removed contamination (water) by monitoring it, purging it and doing pumps and backfills. Installed spare cassettes. Will cool down after final checks (tomorrow).
    - In total about 500ml extracted from east cryostat
    - Continue with west cryostat if no surprises

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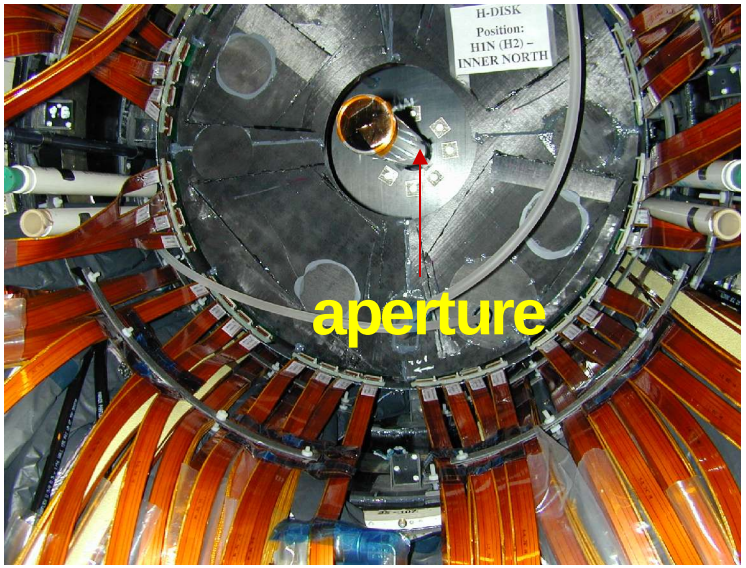
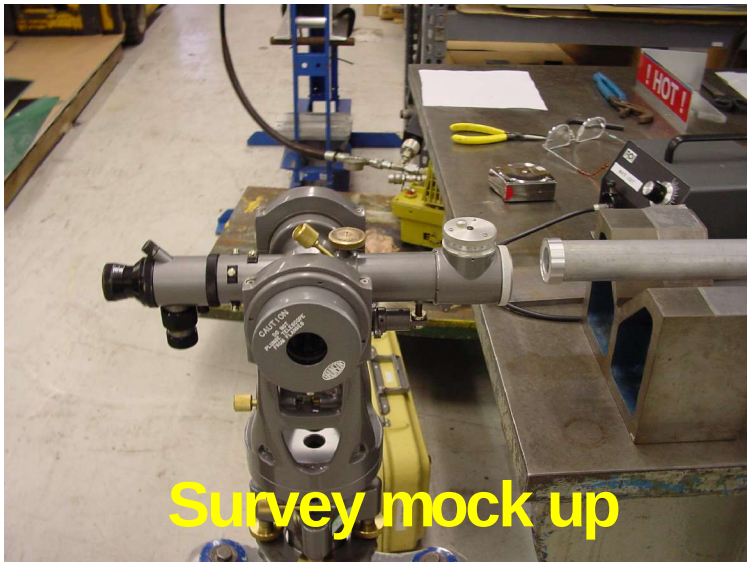
# Shutdown Status

- Silicon
  - Gap access for HDI recovery – **beginning this week**
  - Firmware upgrades, sequencer and VRB modifications for Front-End Busy improvements – **ongoing**
- CTT: Reestablish air flow to PW03 (broken large blower) – **done**
- CTT upgrade: install DFEB crate (including splitters and cabling) and optical ethernet links to the platform – **beginning this week**
- Preparation for Layer 0 upgrade
  - **L0 clearance measurement – end of September → about October 7**
  - Install/rearrange cabling, PS, fuse panels, ...
- L1Cal trigger upgrade: electronics and infrastructure installations – **ongoing**
- L1CalTrk trigger upgrade: install cables – **ongoing**



# Shutdown Plans

| | | | | | | |
|---|---|---|---|---|---|---|
| 26<br>Week 6 | 27<br>Open & secure both EC gaps<br>Start East VLPC cool down<br>HLS level installation starts | 28<br>Both EC gaps open for work | 29 | 30<br>East VLPC cryostat cooled to operating temp<br>Install survey platform in gap (2 days) | | |
| 3<br>Week 7 | 4<br>Fix Solenoid Lead GHe leak (3-4 days)<br>Warm Silicon above dewpoint<br>Open up tracker membrane, prep | 5<br>Disconnect Beryllium beam pipe | 6<br>Begin West VLPC cryostat warm up<br>VLPC test stand warm up | 7<br>Survey L0 beam pipe aperture #4931 | 8<br>HLS level installation ends | 9 |
| 10<br>Week 8 | 11<br>POWER OUTAGE - 8 hrs? Local Fdr 45 maintenance<br>No electronics, no cooling water | 12<br>Begin Solenoid cooldown<br>West VLPC cryostat warm, start purge<br>Remove survey platforms from gaps? | 13<br>Close tracker membrane Cooldown<br>Silicon detector Replace West VLPC relief valve | 14<br>Install cassettes in West VLPC cryostat | 15<br>Pump, backfill, dry West VLPC cryostat | 16 |