

Joint ANL/FNAL SCPF and BCP  
System Update + 3<sup>rd</sup> Harmonic  
Cavity Processing and Testing  
Program Update

Allan Rowe  
Fermilab  
AD/MSD

September 21, 2006

## BCP System Budget & Schedule

- FY06 18.1.x funds fully allocated (<\$1k)
- FY07 requested M&S = \$150k
  - Cost breakdown available
- FY07 requested SWF = 2 FTE
  - Labor breakdown available
- Schedule TBD based on FY07 resources

# BCP System

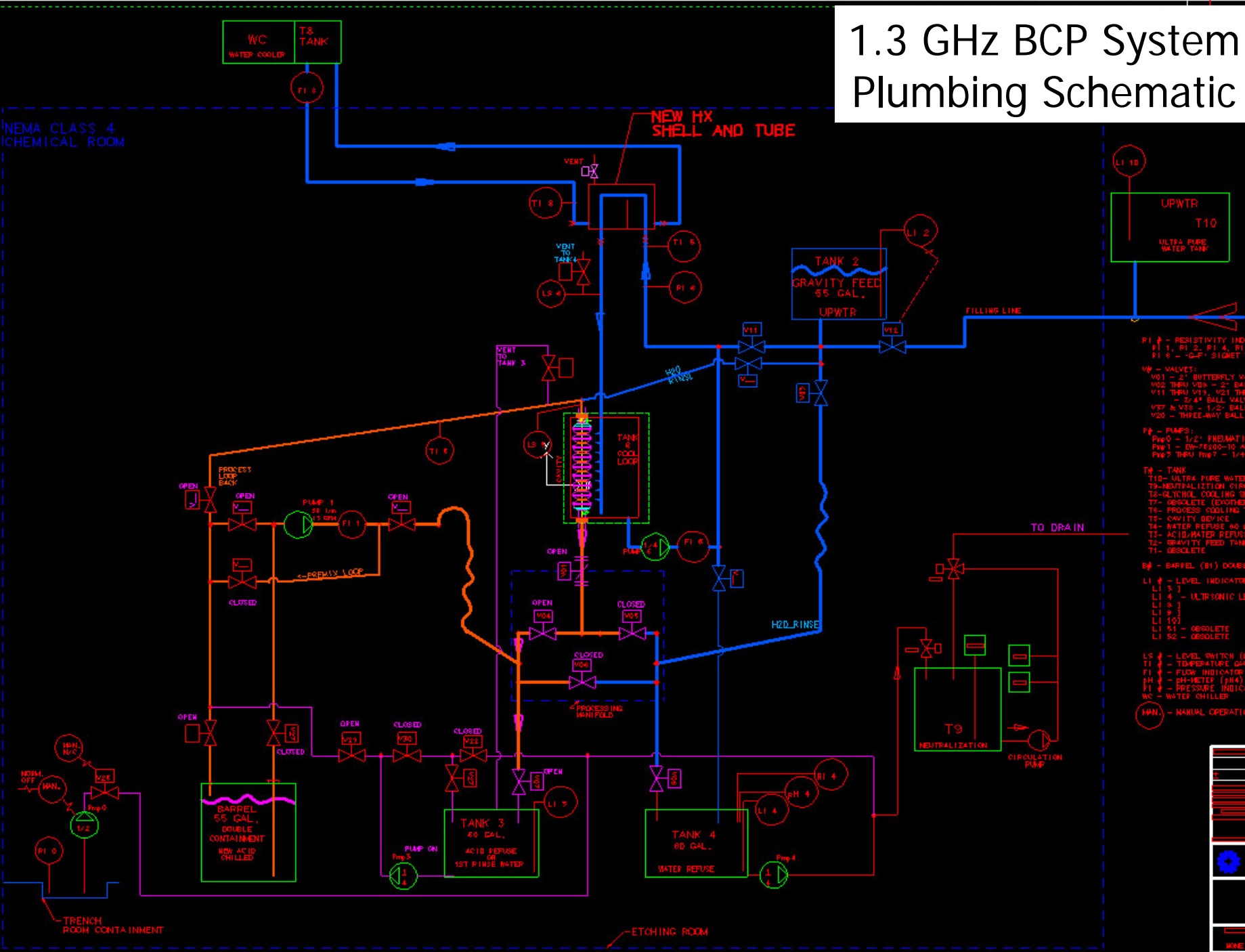
Where we were ~



3.9 GHz Processing  
Setup

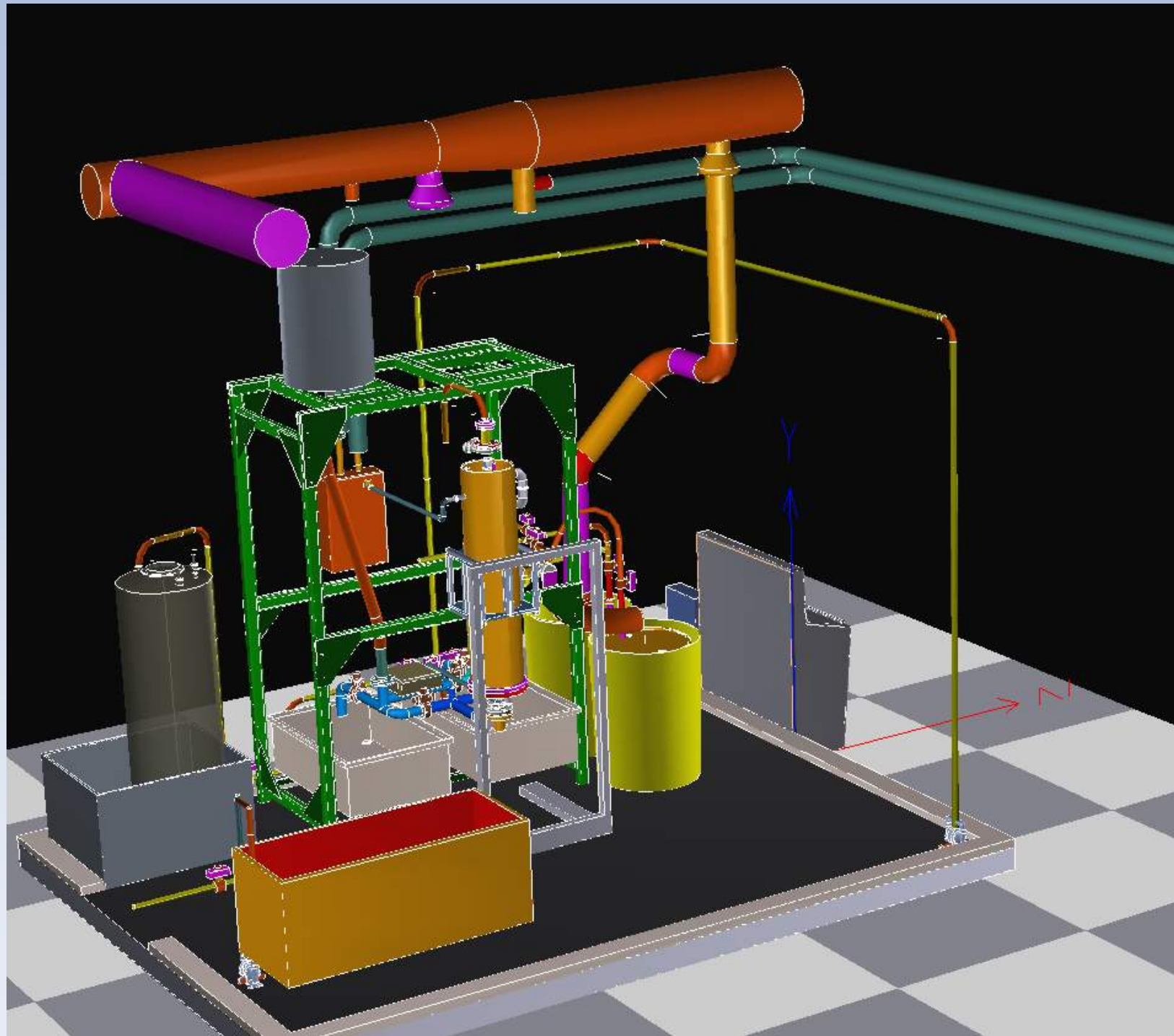
# 1.3 GHz BCP System Plumbing Schematic

NEMA CLASS 4  
CHEMICAL ROOM

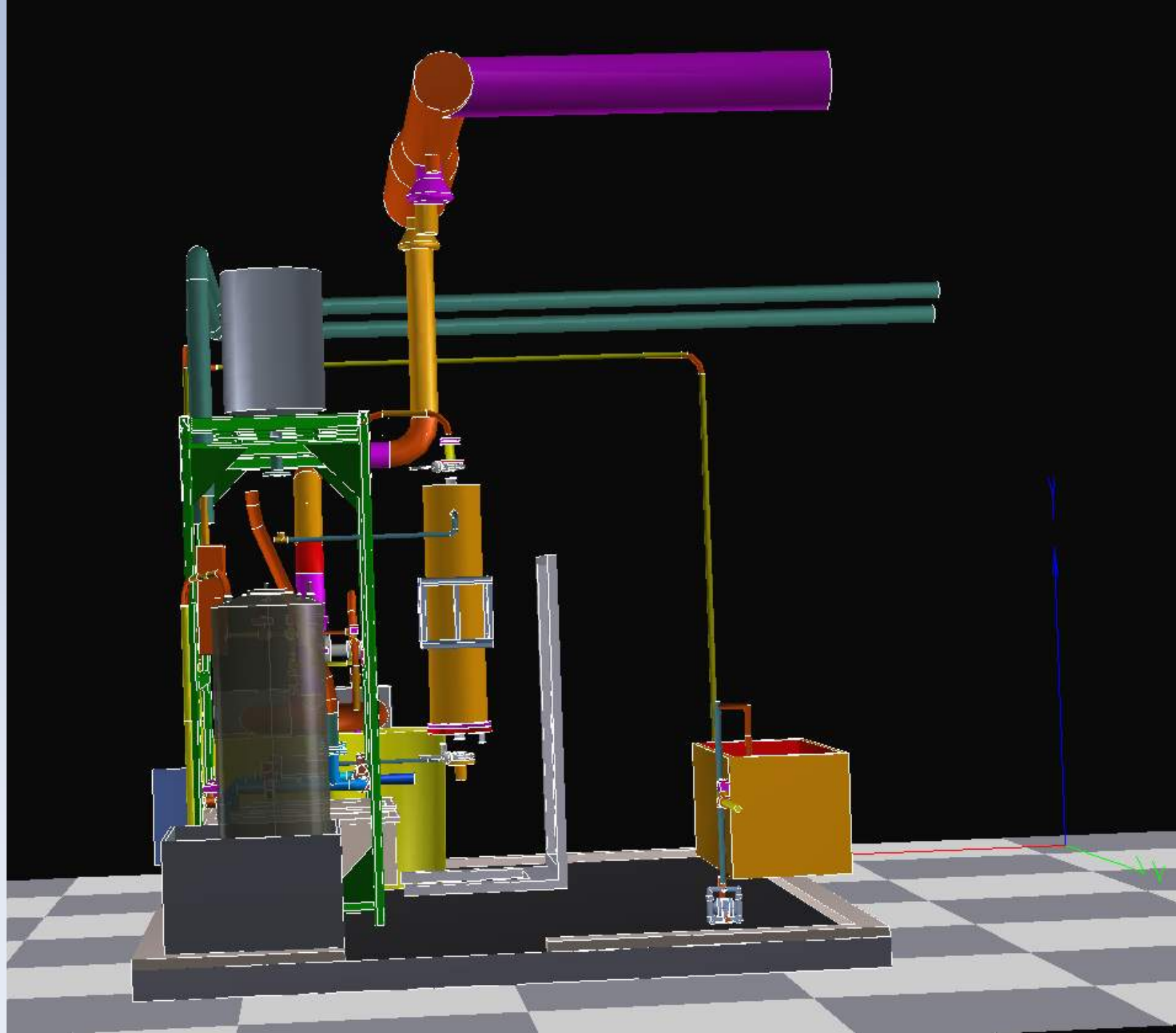


- FI 1 - RESISTIVITY INDICATOR
- FI 2 - RI 4, RI 3
- FI 3 - C.P. SIGMET TANK
- WV - VALVES:
  - WV1 - 2" BUTTERFLY VALVE
  - WV2 THRU WV3 - 2" BALL VALVE
  - V11 THRU V19, V21 THRU V23 - 3/4" BALL VALVE
  - VET & V25 - 1/2" BALL VALVE
  - V20 - THREE-WAY BALL VALVE
- PA - PUMPS:
  - Pmp0 - 1/2" PNEUMATIC
  - Pmp1 - DW-7500-10 AST
  - Pmp2 THRU Pmp7 - 1/4"
- T& - TANK
  - T10 - ULTRA PURE WATER TANK
  - T9 - NEUTRALIZATION CIRCUIT
  - T2 - PLURAL DRAINING TANK
  - T1 - OBSOLETE (EXPOSED)
  - T8 - PROCESS COOLING TANK
  - T6 - CAVITY DEVICE
  - T4 - WATER REFUSE 60 GAL
  - T3 - ACID/WATER REFUSE
  - T2 - GRAVITY FEED TANK
  - T1 - OBSOLETE
- B1 - BARREL (B1) DOUBLE
- LI 1 - LEVEL INDICATOR
- LI 2 - ULTRASONIC LEVEL
- LI 3 - ULTRASONIC LEVEL
- LI 4 - ULTRASONIC LEVEL
- LI 5 - ULTRASONIC LEVEL
- LI 6 - ULTRASONIC LEVEL
- LI 7 - ULTRASONIC LEVEL
- LI 8 - ULTRASONIC LEVEL
- LI 9 - ULTRASONIC LEVEL
- LI 10 - ULTRASONIC LEVEL
- LI 51 - OBSOLETE
- LI 52 - OBSOLETE
- LS - LEVEL SWITCH (LS)
- TI - TEMPERATURE GAUGE
- FI - FLOW INDICATOR
- PH - PH-METER (pH)
- PI - PRESSURE INDICATOR
- WS - WATER CHILLER
- MAN. - MANUAL OPERATION









## 3.9 GHz 3<sup>rd</sup> Harmonic Cavity Processing Update

- Cavity #3 processing is underway
- RF measurements, leak checking, & mechanical measurements are completed
- Outside surface etch on Sept. 25
- First vertical test middle-late October.