

LAr R&D Progress Report

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1/30/24

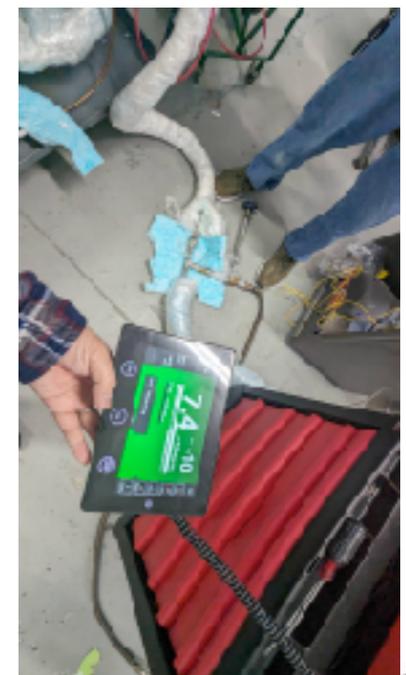
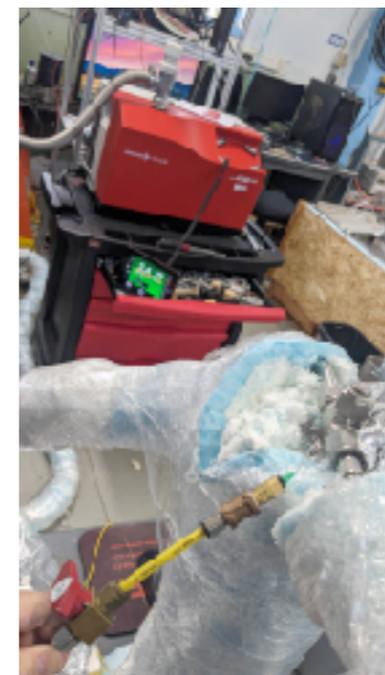


Lab Safety and Space Management

- **Building 510 Electrical Power Shutdown**
 - Just received notice that there will be a major power shutdown in Bldg 510 for maintenance
 - The shutdown is expected to be for the entire weekends
 - Our cryogenic operations run through at least 2 weekends
 - Coordinate with safety for the exact dates to arrange our operation
 - Should have no impact on the upcoming run
- **Crane work order**
 - A crane Work Order for maintenance put in for 2/1-4/1
 - The actual maintenance should only take a day
 - Minimum impact to us

Preparation for the next purity run

- LAr plumbing for the filling
 - The filling line plumbing installation is complete
 - All the fittings are He leak-checked with leak tightness confirmed
 - The filling lines upstream of the inline filter are wrapped with cryo-insulation



Preparation for the next purity run

- Pump-and-Purge of the main dewar
 - Currently conducting the pump-and-purge procedures
 - Charging the main dewar with pure GAr to 1 atm and pump-down, repeat for 3 times
- PrM test in GAr
 - PrM was run in 1 atm pressure
 - Full power of Xe lamp delivered to the cathode
 - The signal was observed on both channels
- Cryogenic System Slow control system
 - All the sensors including, pressure transducer, level gauge, temperature sensors connected and tested
- LAr delivery
 - LAr delivery was expected on 1/29 Monday but was delayed
 - Contacting the vendor to get the exact delivery time
 - Ready for fill by tomorrow

