

260-L LAr System Progress Report

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Lab Safety and Space Management

- COVID level in Suffolk County is in LOW
- Face masks are optional onsite at BNL
- ESH Inspection L1 11am on Wednesday
 - Regular monthly inspection
 - Xenon extraction is done
 - Highbay lab cleaned up and ready for the inspection



Xenon gas purity analysis for PIONEER

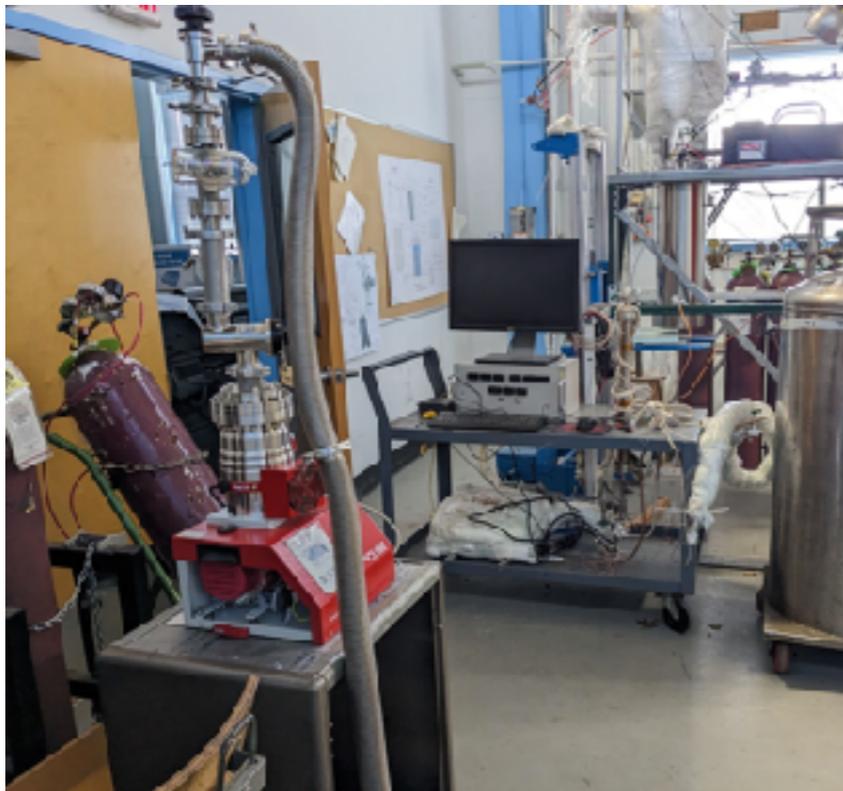
▸ Xenon Extraction for Chemical Analysis

- System cooling down before extraction, a table fan used for accelerate the process, about 2 hrs to RT
- Sample cylinder charging following the SOP, storage tank starts with ~550 psig, take ~10 rounds to charge to 155 psi
- Shipped to the vendor in NJ with a waterproof protector case
- The vendor has confirmed the reception, results expected by the end of next week
- Assuming the purity is still good, next to move on to batch extraction and property management paper work in order to send the Xenon to PSI



260-L System 2nd purity run

- Proceeding following the plan presented last week
- Setting up the inline filter activation and monitoring as planned
- The leak detector is expected to back from Will tomorrow
- I will start the PrM bench test once the activation process starts
- Plan document: https://docs.google.com/document/d/14GnwKKO2w51nc-pjVz_HpPn-AMeLpFyGILf3rRBCh5U/edit#



Week 05/01-05/07:

Goals:

- Reactivation of the inline filter (IN PROGRESS)
- PrM bench test during the activation process

Steps:

- ~~Move the inline filter station back~~
- ~~Plumbing the activation gas supplies and gas analyzer monitoring (IN PROGRESS)~~
- Leak check the system (Waiting for leak detector back)
- ~~Install the heating tape and insulation (IN PROGRESS)~~
- Start the activation process following the SOP
- Bench test the electronics for PrM for functionality
- Xenon lamp optical system double-check

Procurements and Misc.

- ▶ **Vendor exhibition during CFN, NSLS and LBMS user's meeting**
 - KHV is recently busy with production
 - Alternative vendors found on the vendor exhibition: ANCORP, GNB King Lai Group
 - Sent the gas sampling manifold and plumbing system to quote for welding fabrications

