

260-L LAr System Progress Report

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Lab Safety and Space Management

- COVID level in Suffolk County is in MEDIUM now, hopefully will reduce to LOW
- Face masks are optional onsite at BNL
- Be careful onsite today due to slippery surfaces
- CRP coldbox will be sent back from Yale
 - The cold test is done at Yale. It is a lab property that has to be sent back
 - Not sure about the location, not expected to be back into highbay lab, will update once figured out
- Plumbing of the LN2 tank into highbay
 - Requirements laid out by Mike Gaffney
 - A design review
 - The piping would need to meet ASME B31.3 process piping standards. (Confirming with CryoFab)
 - Cold trap volumes would require pressure relief devices
 - Fixed Oxygen monitoring would be required for the high bay as it would increase ODH level
 - “Should not be too complicated”

Preparation for the next run

- LAr delivery
 - LAr order was delivered to highbay, sooner than expected
 - The dewar is in a good shape this time
 - Empty dewars removed
 - Will continue with the gas analyzer reading validation with the evaporated GAr from the LAr supply



Parts Procurement

▸ Vacuum pump procurement

- PO dispatched to Pfeiffer Vacuum, due in 1 month.
- Pfeiffer Vacuum BNL local contact sales reached out and will make a lab visit next time coming onsite with a leak detector for demo
- Requiring a quote for the leak detector with the sales

▸ Gas analyzer supplies

- O₂ analyzer replenishment solution PO received from the vendor
- H₂O analyzer HD replacement was ordered on CC, waiting for delivery

▸ Liquid/Gas supplies

- UHP Ar and Ar+3%H₂ mixture activation gas, PO dispatched
- LAr refill received, the future delivery time is expected to be reduced because the medical demand is decreasing

▸ LAr heater

- Had a meeting with the engineer from Thermocoax, waiting for the engineering design and quote

▸ Burst disk

- Vendor Pro-Quip is working with the factory in Ohio to provide the engineering design and quote

▸ Hot getter cartridge

- The lifetime of the cartridge of the hot getter we have is low according to the recent discussion with the SAEs, inquiring a quote

