Hg System Status

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Syringe Pump at ORNL

- Hydraulic power unit (HPU) and syringe cylinders delivered to ORNL July 21
  - Hg cylinder discharge piping shipped separately due to weld inspection problems, delivered Aug 1
- Cylinders set directly on target cart until secondary containment received
HPU Setup

- Hydraulic fluid fill and drain process developed using peristaltic pump
  - Pump works well, takes ~30 min to fill system

- Fluid filter assembly added to HPU
Manual Control Operational

- Fluid added to HPU and hoses connected to syringe cylinders
- Manual control on HPU used to stroke cylinders
Initial Water Testing Setup

- A primary containment has been mocked up to allow initial water tests to be performed
- Will be used to debug Labview control software and test some of the sensors
Control System Connections

- Calibrated position sensors
- Labview hardware installed in HPU cabinet
- Wiring to start later this week
- Initial version of Labview software complete, ready for test and debug once wiring in place
Other Fabrications

• Secondary containment progressing at Princeton

• Jet chamber shell weldment completed, machining to proceed soon
Conclusions

- Manual control of syringe demonstrated
- Hydraulic system fill and drain procedures developed
- Hg control system wiring is underway, water tests to start afterwards
- Ready for Hg testing after conclusion of water tests and when remainder of fabricated components available