UT-BATTELLE

Hg System Assembly and Testing Status

V.B. Graves

P.T. Spampinato

MERIT VRVS Meeting

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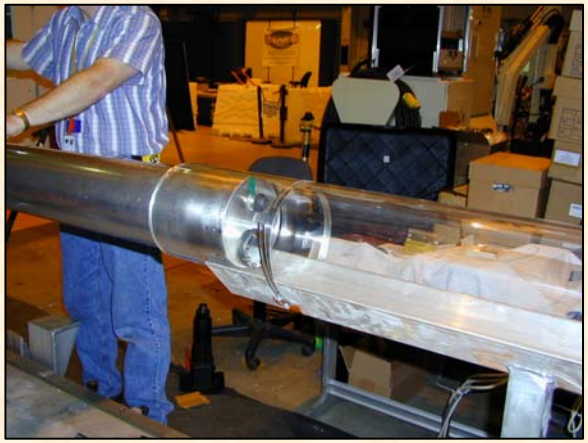
OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY

Hg System Assembly Test

- **Successfully completed assembly testing**
- **Transferred Hg system from transporter to common baseplate**

Basic Assembly Process

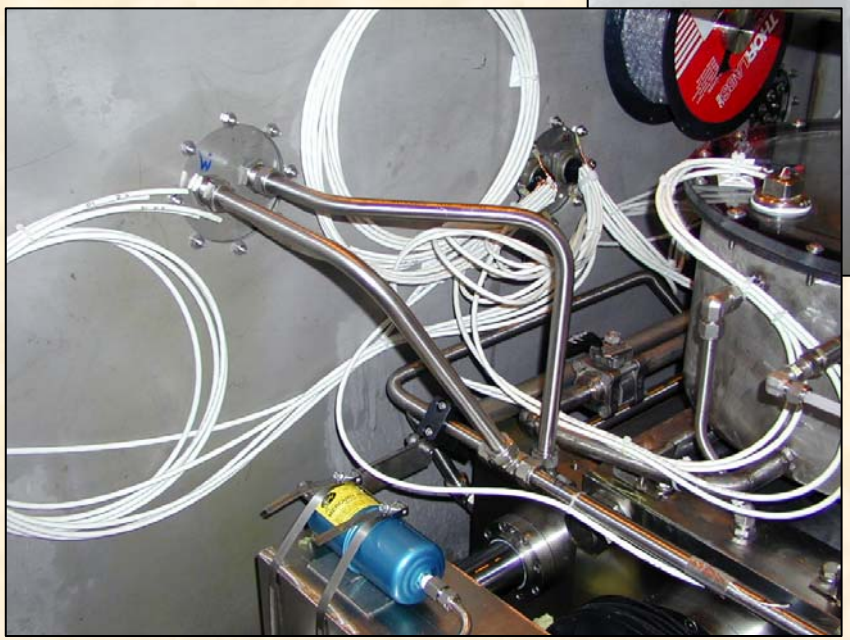




Baseplate Shipped to MIT

- **Common Baseplate with floor liners shipped to MIT Nov 21**
- **All attachments removed and packed in separate box with liners**

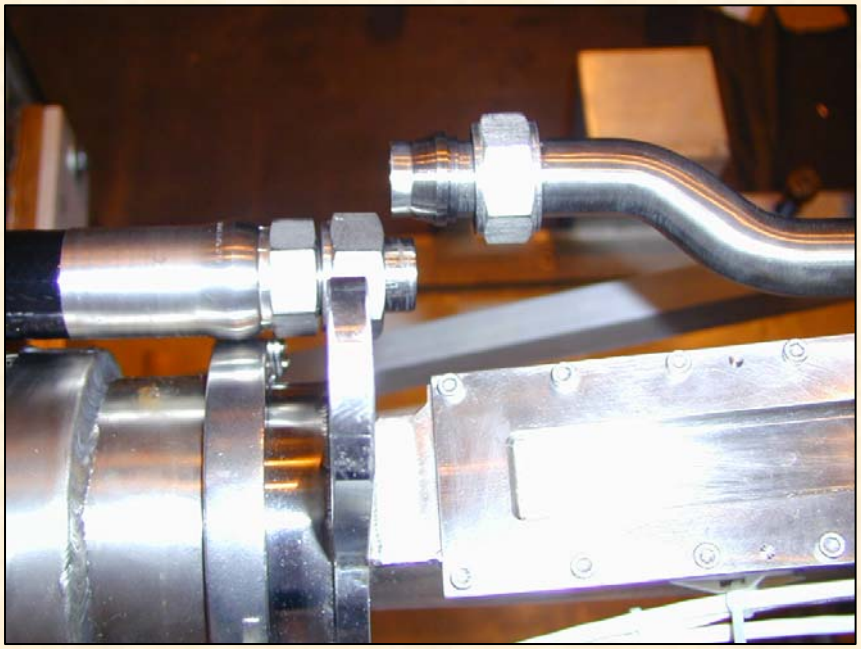
Hydraulic Hose Issue Corrected

- **Replaced flex hoses with rigid tubing**



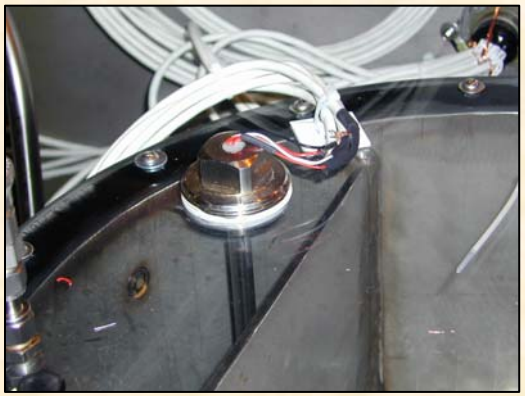
SS Nozzle Issues

- **Supply piping for two nozzle configurations had different lengths**
- **Longer piping being shortened**
- **Flex hose too long, being replaced with correct end fittings**

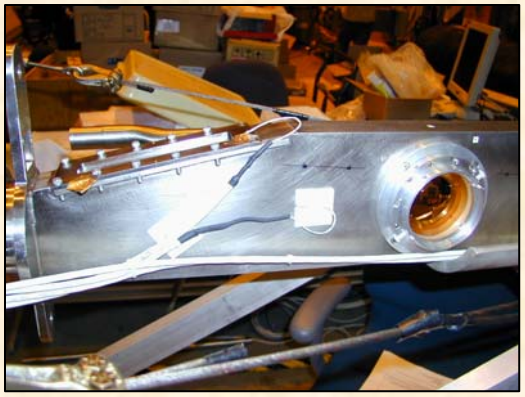
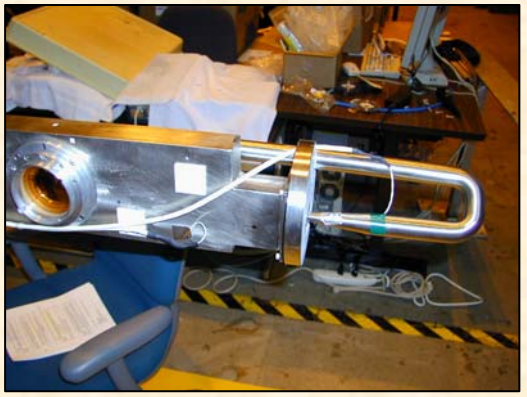


RTD's Installed

- **Eight resistive temperature devices (RTD's) installed within secondary & integrated with Labview**
  - **Hg in sump**
  - **Hydraulic fluid**
  - **Hg near cylinder inlet**
  - **Air temp in secondary**
  - **Downbeam primary window**
  - **Downbeam bore air temp**
  - **Upbeam bore air temp**
  - **Nozzle flange/reducer**





Hg Fill/Drain Process Developed

- **Methodology developed, procedure being written**
- **Process to be tested with water**

Hg Fill

Hg Drain

Current Status / Next Steps

- **Perform fill and drain procedures using water**
- **Complete primary containment**
- **Leak testing**
- **Run water tests with Nozzle A**
- **Install optical diagnostics**
- **Switch to Nozzle B**
- **Complete secondary containment**
- **Final preparations for Hg**