

Hg System Assembly and Testing Status

V.B. Graves

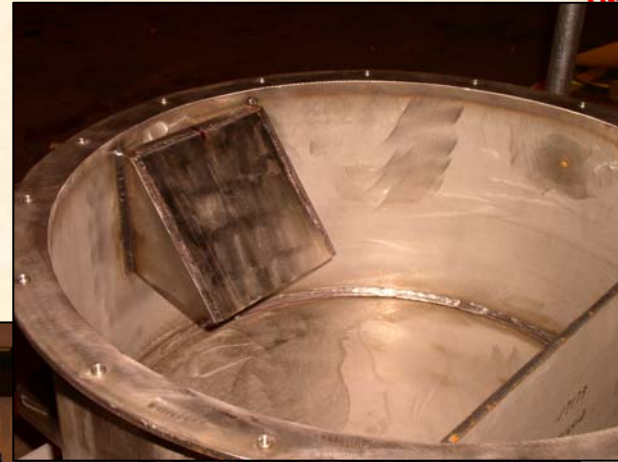
P.T. Spampinato

MERIT VRVS Meeting

Nov 1, 2006

Welding Completed

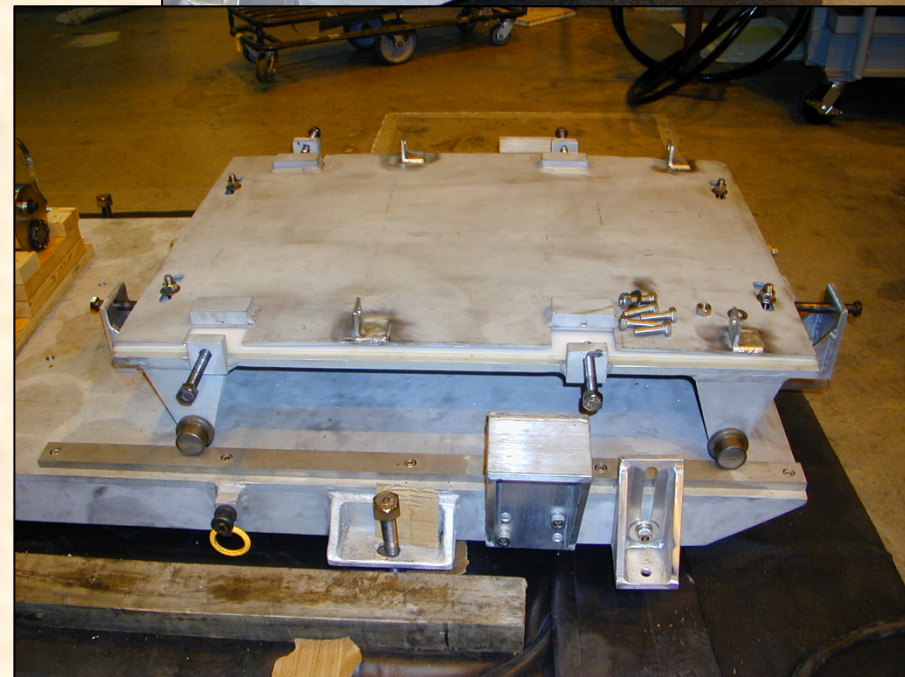
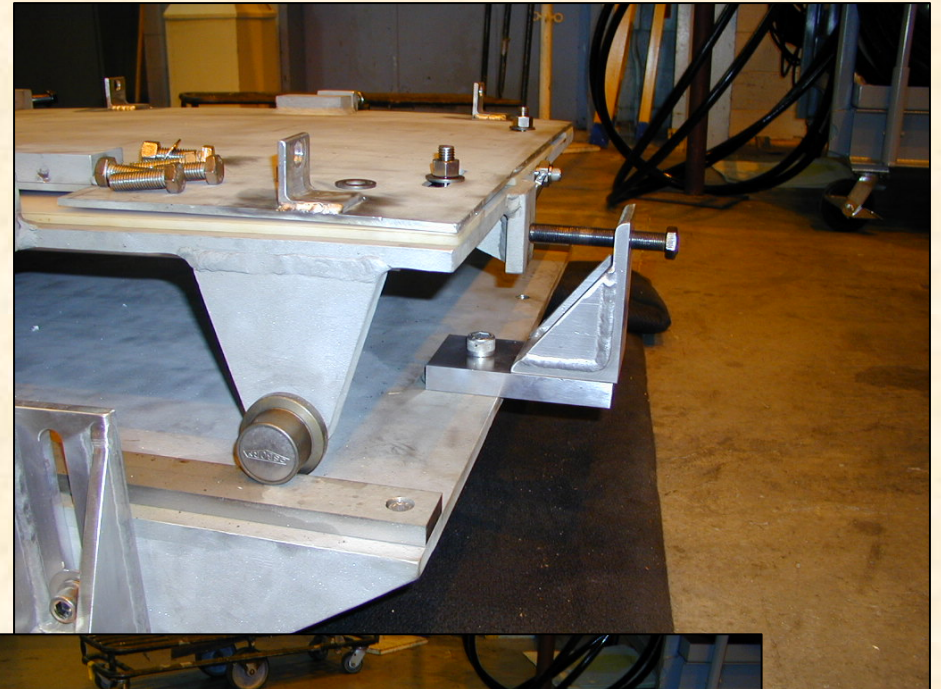
- Sump tank deflector
- Hoisting/forktruck channels
- Cart stiffeners



OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY

Cart Modifications

- **Secondary box center of gravity slightly shifted from estimated location**
- **Cart will be further back on common baseplate**
- **Secondary box locating tabs welded in position**



Secondary Snout Fiducialized

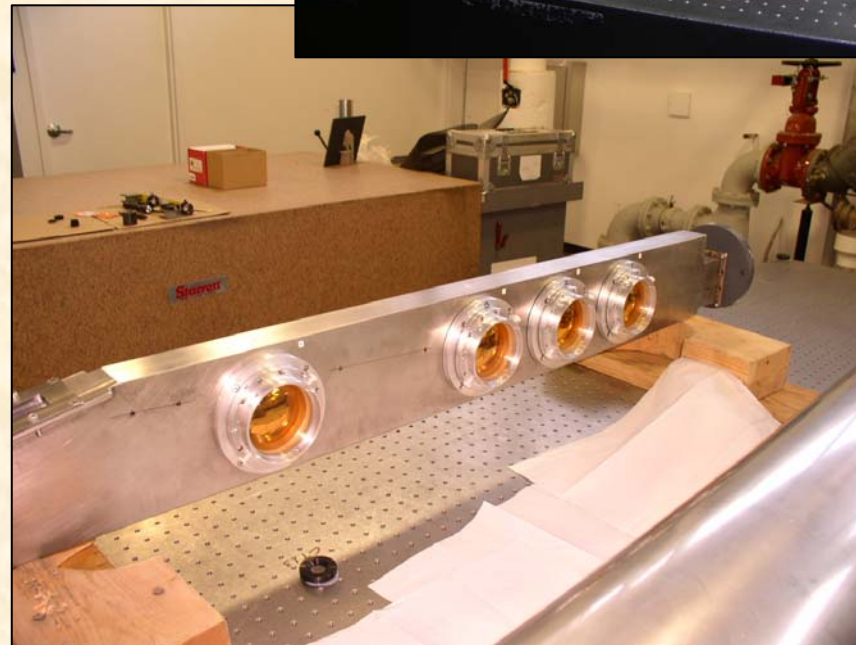
- Marks on exterior of target snout will aid in alignment (tilt and elevation only)
- Service provided by SNS Survey & Alignment Group at no cost



OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY

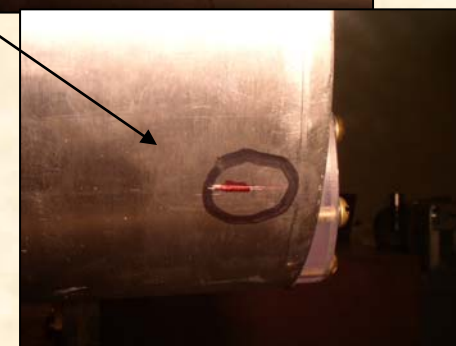
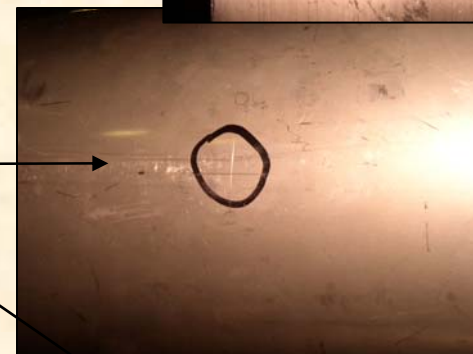
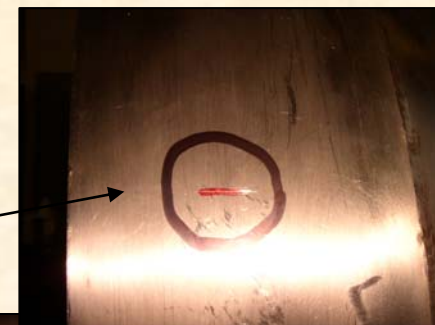
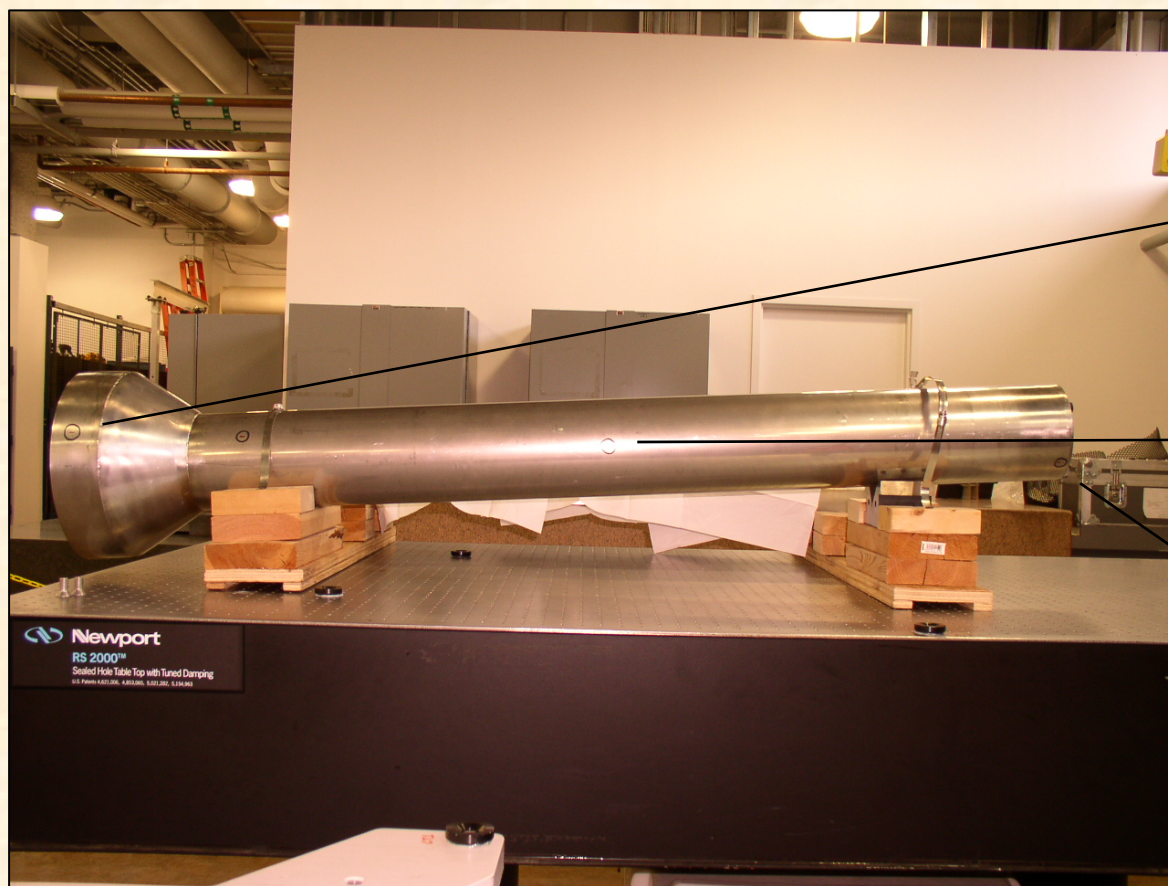
Jet Chamber Surveyed

- Reference was viewport center at $Z=0$
- Accurate ($<1\text{mm}$) marks scratched on sleeve surface indicating beam line when target tilted to 66 milliradians
 - Dimensional information provided by Solidworks CAD models
- Once beam line established, data transferred to secondary sleeve
 - Upstream beam window not available



Installation Marks

- **Optical survey equipment required to see scribe marks**



OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY

Wiring Started

- **Sensor wiring inside the hydraulic control cabinet has been started**
- **RTD wiring completed**
- **Wire bundles provided by Princeton (using halogen-free cables from CERN)**



OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY

Final Assembly Started

- Interior of secondary box cleaned with degreaser and alcohol
- Syringe placed inside box in final position



OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY



Current Status / Next Steps

- **Populate secondary box ports**
- **Complete plumbing inside secondary containment**
- **Finish wiring inside HPU & start wiring inside secondary containment**