

MiniBooNE Status Report

Beam Temporarily Out-of-Order

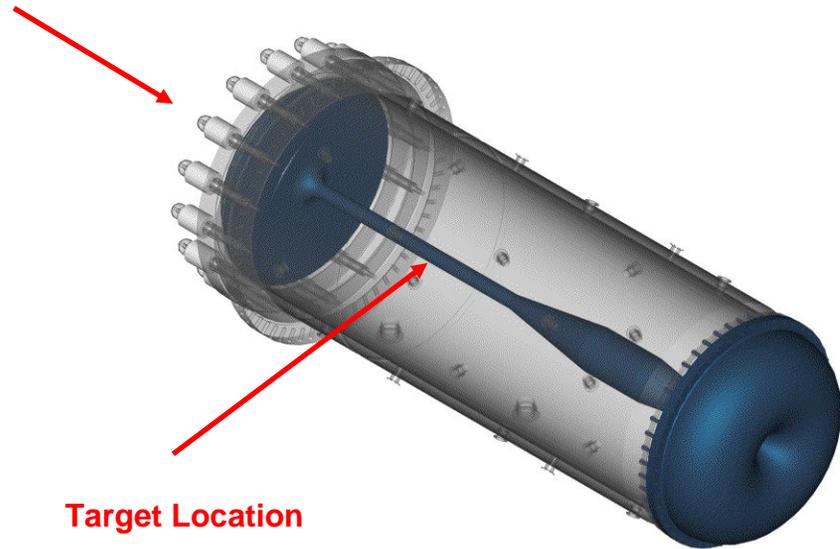
Ray Stefanski

January 29, 2007

1. 25 Meter Absorber Progress Report:
 - a. A seismic event was reported at the 9 AM meeting.

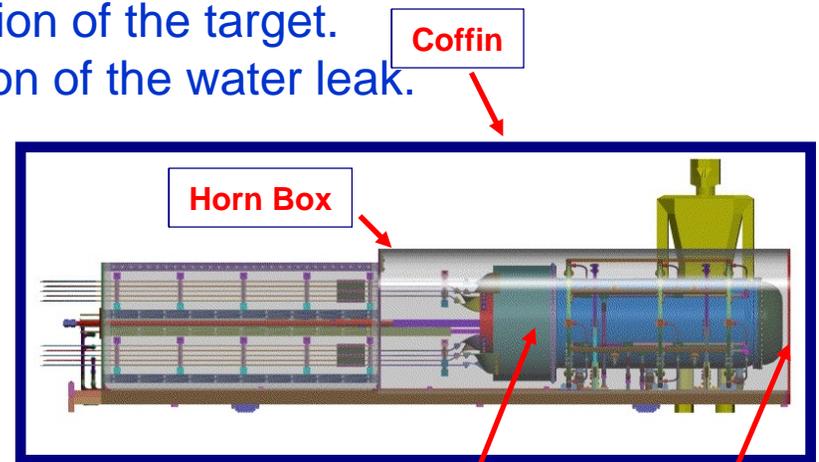
2. Report on the investigation of water leak in horn #1
 - a. Horn #1 failed in the summer of 2004.
 - b. Access the horn from the downstream end.
 - c. Horn #1 is contained in a horn box.
 - d. Goals:
 - verify the condition of the target.
 - verify the location of the water leak.

Beam Direction



Target Location

Line of Sight



Coffin

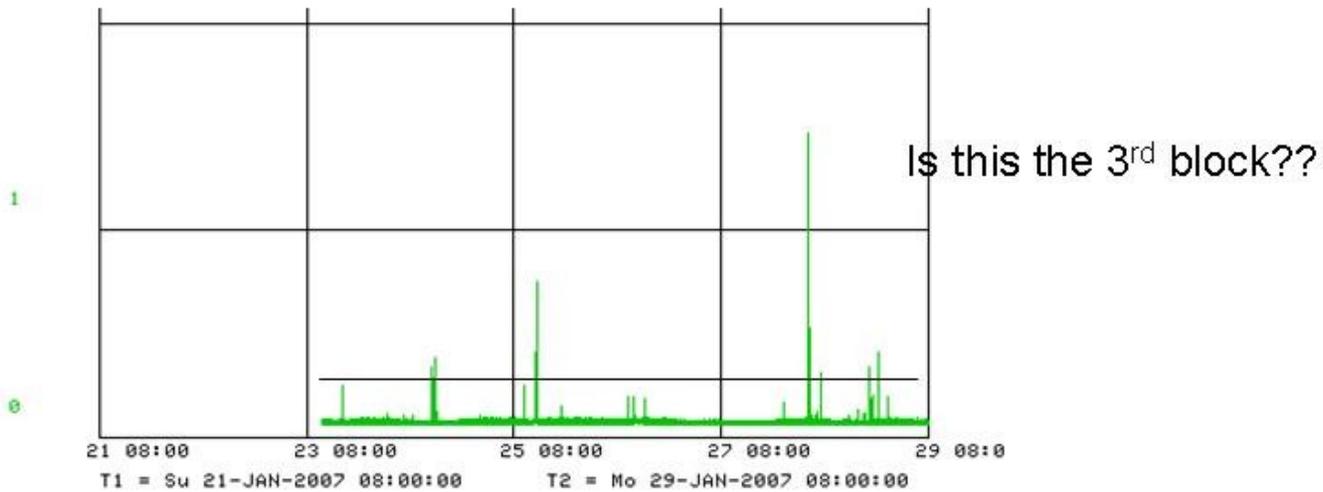
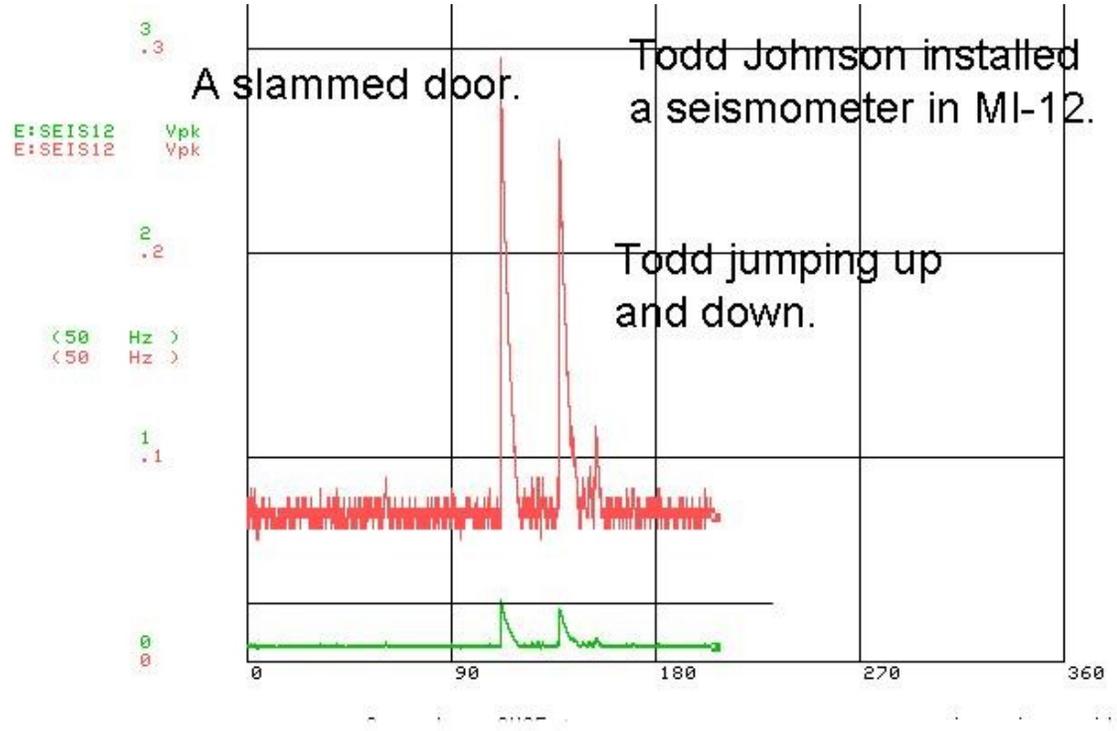
Horn Box

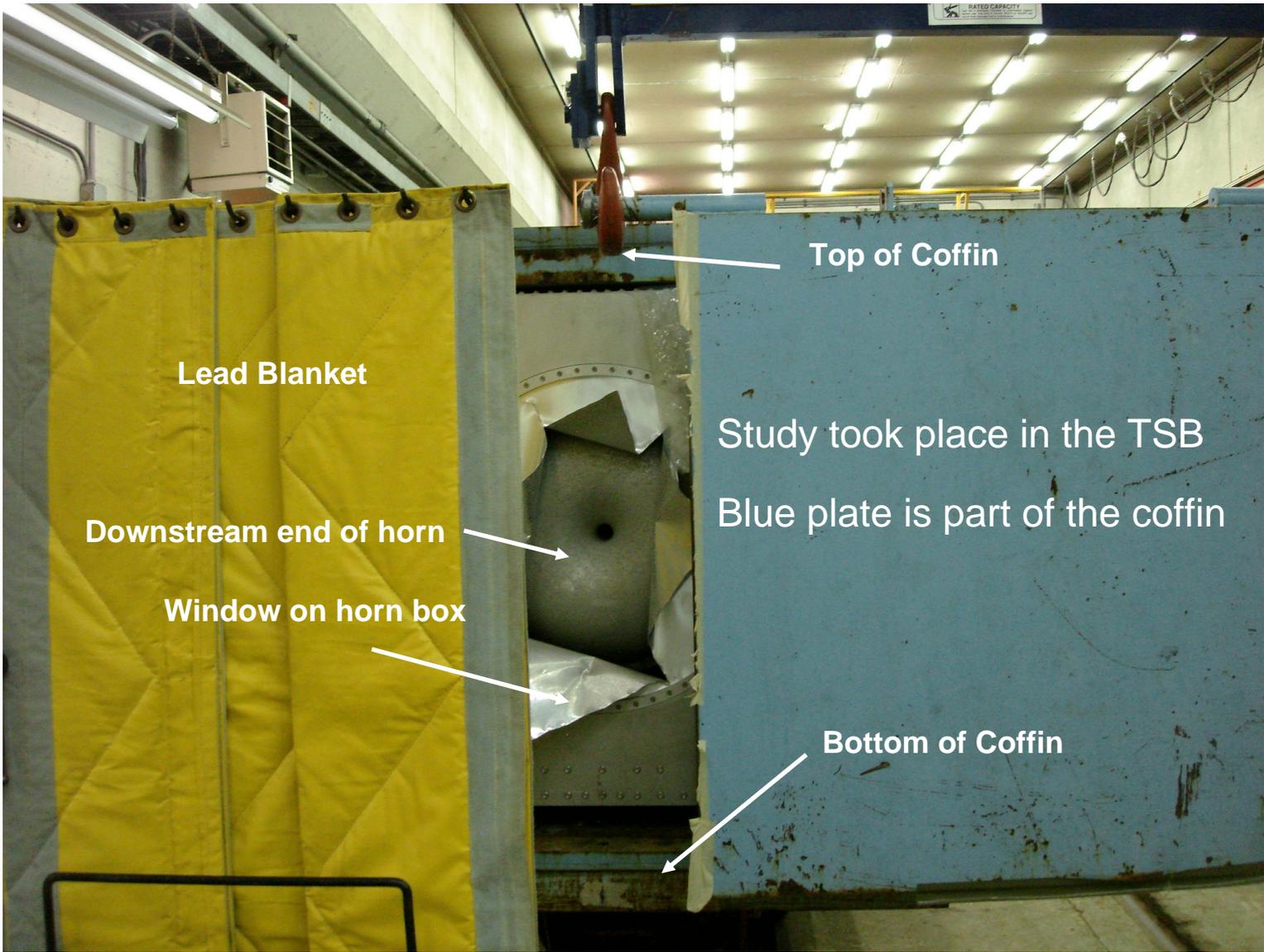
Target Location

Thin Al beam window
On horn box

Mechanical Support Group
AD Radiation Safety
AD Fixed Target Group
Gerry Garvey
Larry Bartoszek

Reported by Craig Moore at the 9 AM meeting.





Lead Blanket

Downstream end of horn

Window on horn box

Top of Coffin

Study took place in the TSB
Blue plate is part of the coffin

Bottom of Coffin

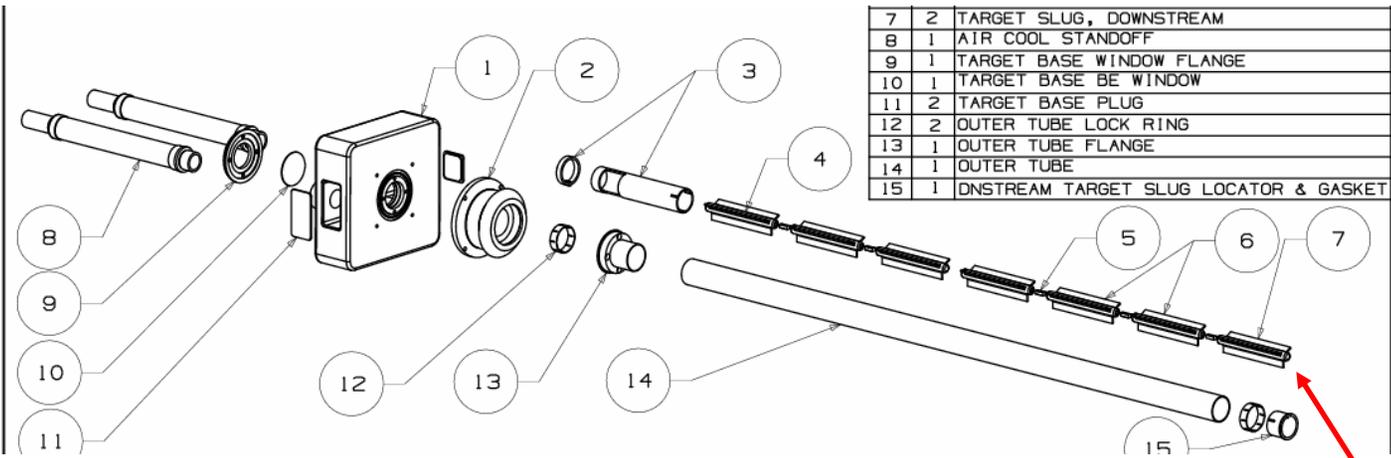
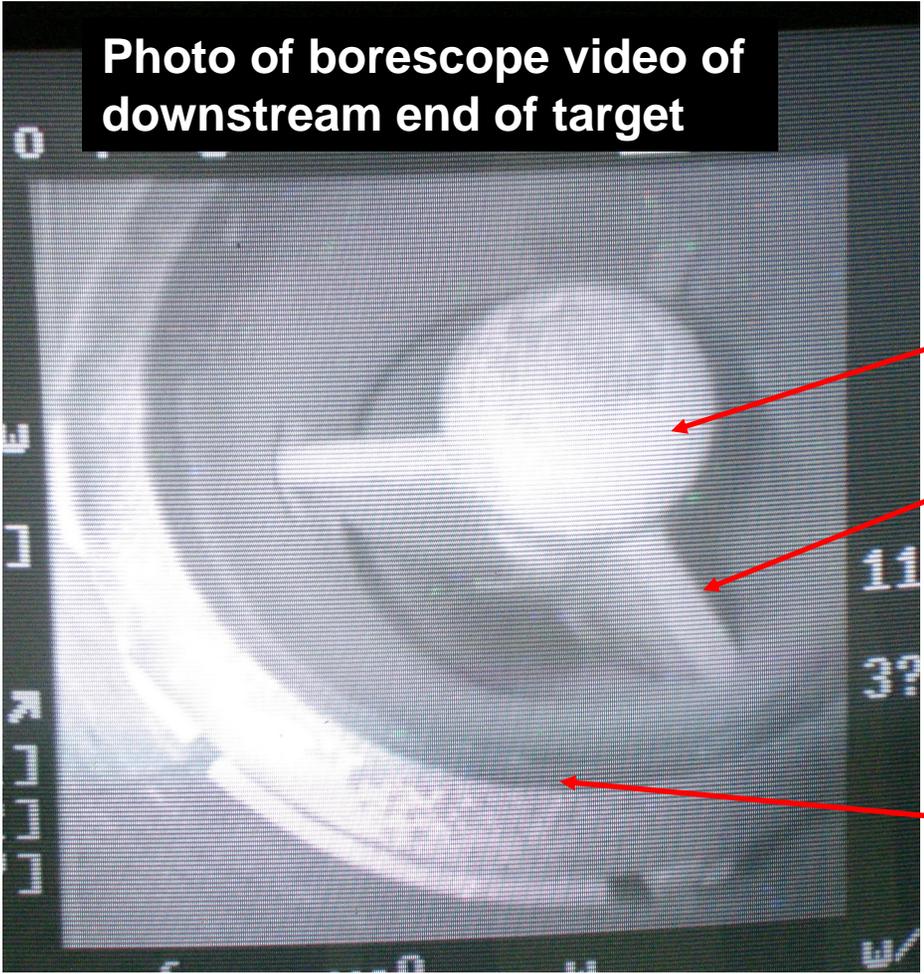


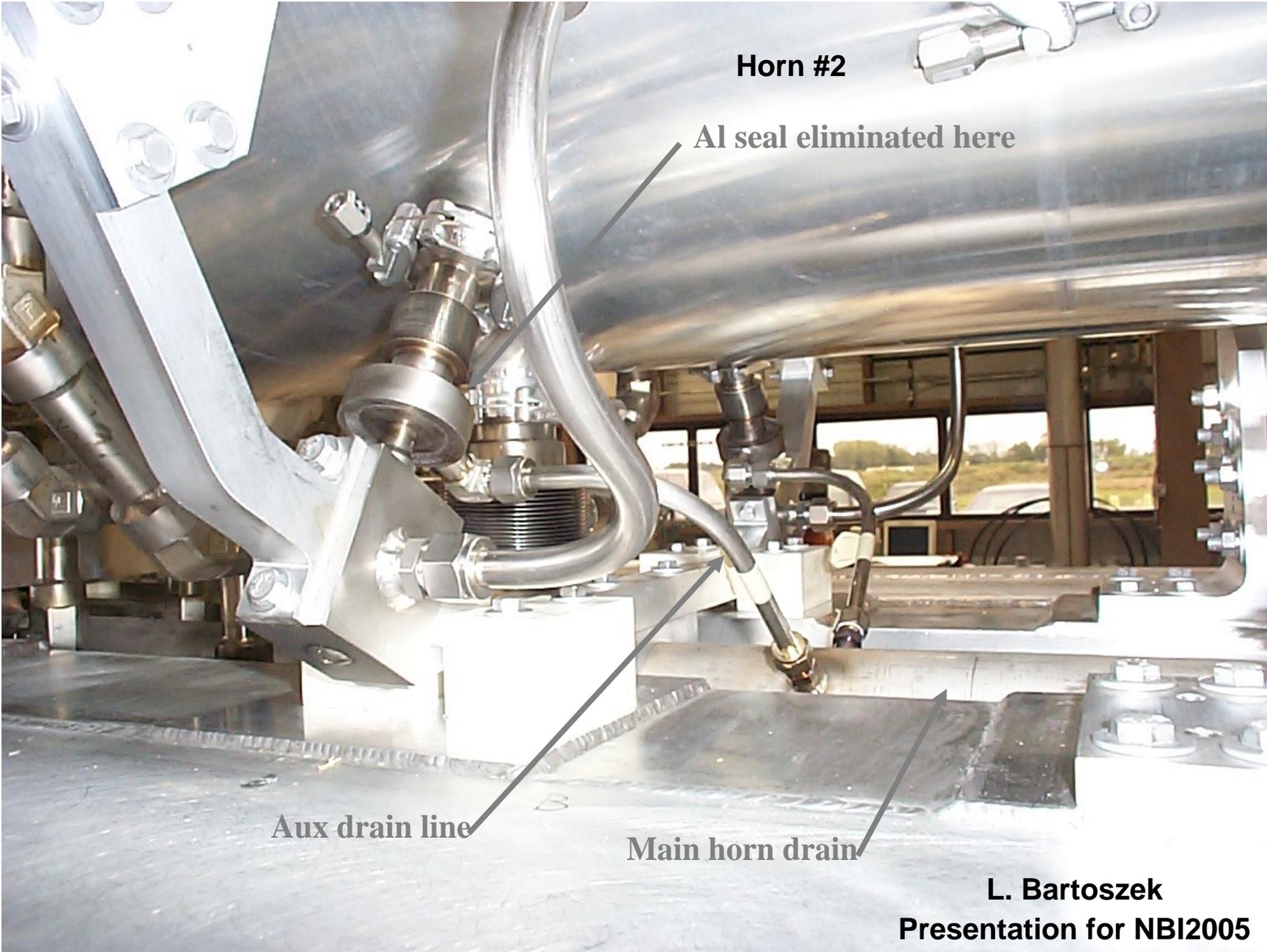
Photo of borescope video of downstream end of target



Thin Be tube contains seven Be slugs each about 10 inches in length.

Cooling fins; Air flow is into the tube.

Downstream target slug locator and gasket.



Horn #2

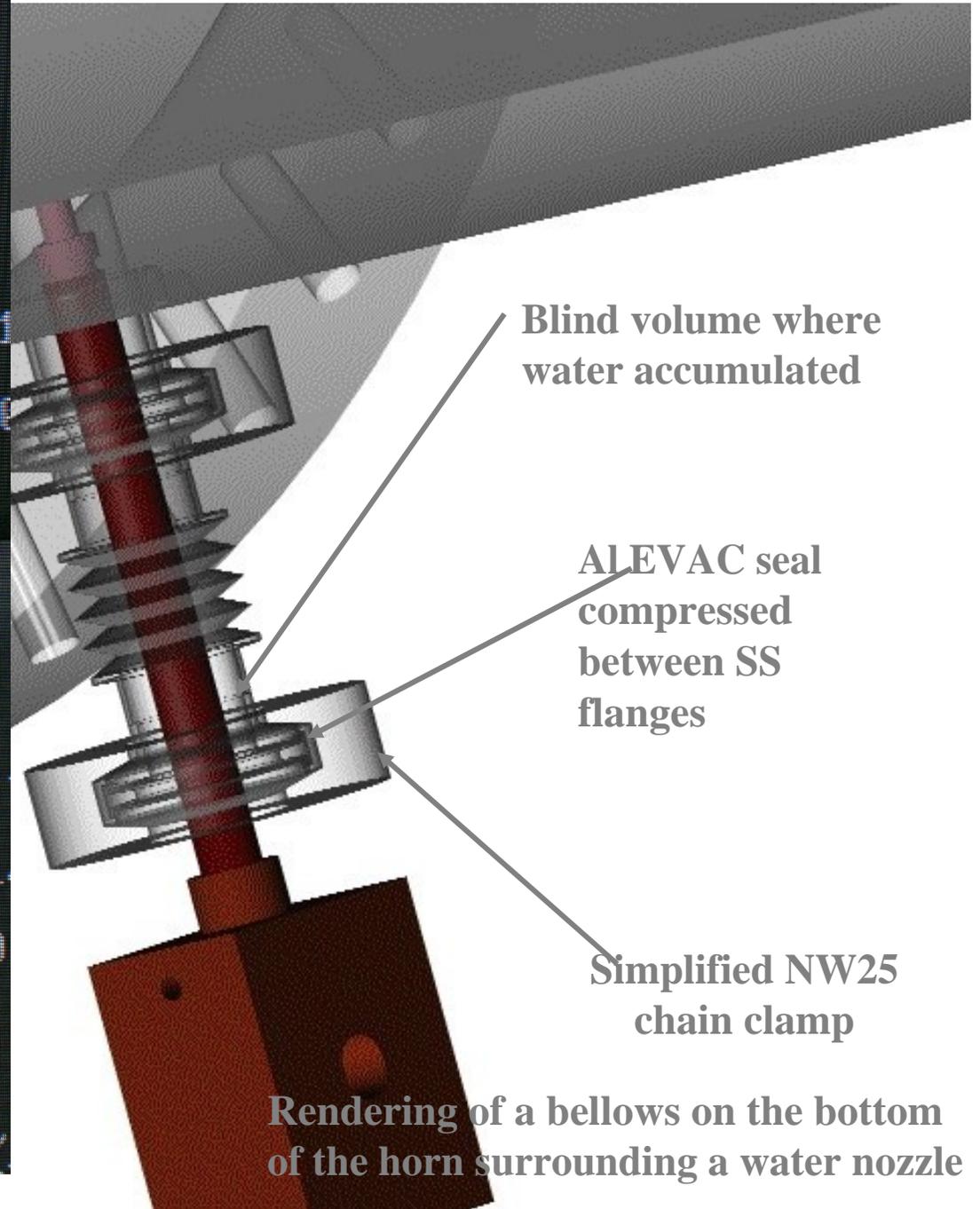
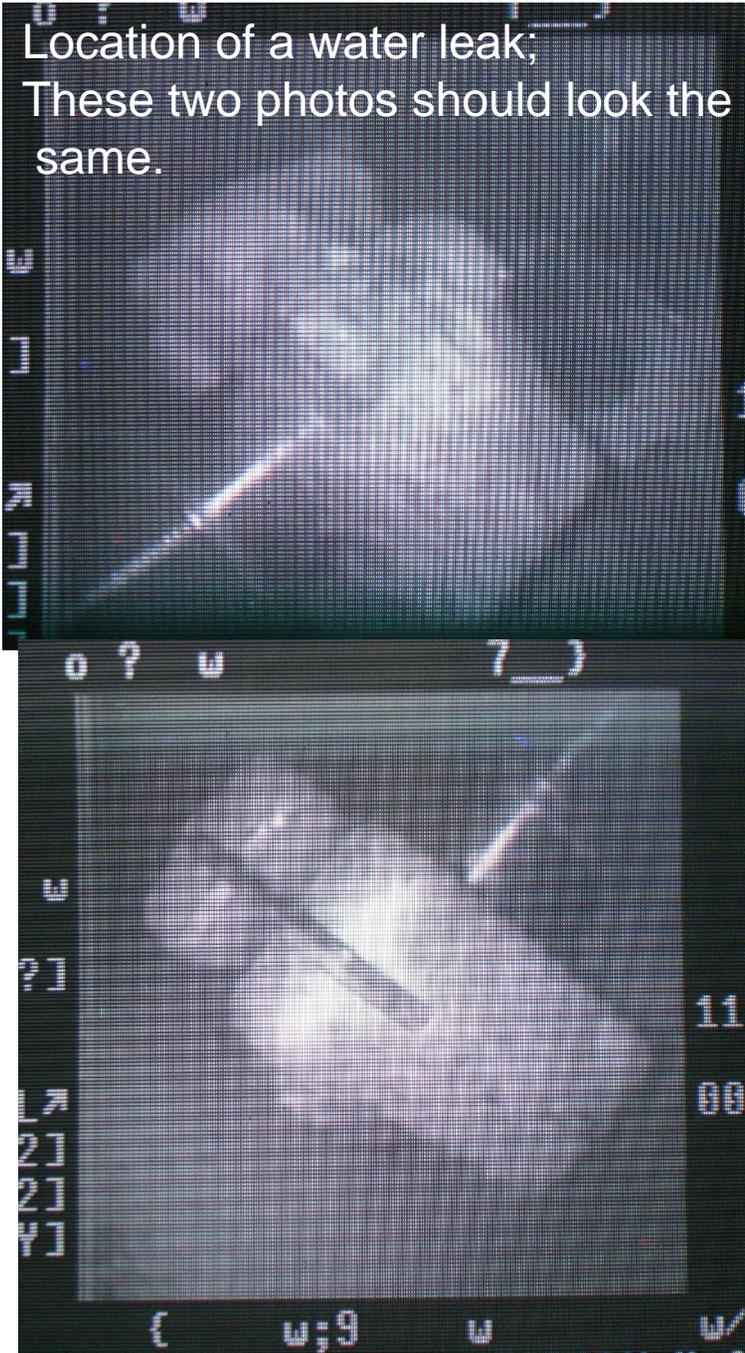
Al seal eliminated here

Aux drain line

Main horn drain

**L. Bartoszek
Presentation for NBI2005**

Location of a water leak;
These two photos should look the same.



Blind volume where
water accumulated

ALEVAC seal
compressed
between SS
flanges

Simplified NW25
chain clamp

Rendering of a bellows on the bottom
of the horn surrounding a water nozzle

Conclusions:

- 1. Design and review progressing on the 25 M absorber repair.**
- 2. Investigation of the failure on Horn #1 proves that the target was in good shape, even after 100,000,000 pulses. The source of the water leak was confirmed.**

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