Jefferson Lab Alignment Group

Data Transmittal

TO: Tim Whitlatch and Brian Carpenter	**DATE :** March 18, 2004	
FROM: Richard Schwartz	**Checked:**	**#** Z920

Details:

The following are the results of the SNS high beta vacuum vessel 07 inspection performed the week of March 15, 2003. A right hand coordinate system was established with the central axis running through the upstream and downstream reinforcing rings. The X axis was defined by a plane using the three top hat flanges. Positive X is to the beam left. Positive Y is up. Positive Z runs downstream with Z = 0 at the face of the upstream reinforcing ring. Values are in inches. Attached is the check sheet with measured values to the corresponding features.

Vacuum vessel overall straightness: (CRM9003000-0000, 2/5)	**X**	**Y**
Reinforcing Ring – Upstream	0.00	0.00
Reinforcing Ring – 2nd	0.08	0.02
Reinforcing Ring – 3rd	0.01	0.06
Reinforcing Ring – 4th	0.04	0.07
Reinforcing Ring – 5th	0.10	0.09
Reinforcing Ring – 6th	-0.05	0.08
Reinforcing Ring – Downstream	0.00	0.00

Rail Position:
(CRM9003000-0000,4/5)

Station	**Z**	**X**	**Y**
Upstream	8.20	-10.30	-15.73
Downstream	182.07	-10.17	-15.76

Top Hat Flange: (CRM9003000-0000, 4/5)	**Z**	**X**
Upstream	40.58	0.06
2nd	56.36	0.05
3rd	149.33	0.08
Downstream	165.12	0.09