Jefferson Lab Alignment Group

Data Transmittal

TO: Tim Whitlach, Brian Carpenter		**DATE:** May 27 2004
FROM: Richard Schwartz	**Checked:**	**# :** Z931

DETAILS:

The following are the results of the SNS high beta vacuum vessel 04 inspection performed the week of May 24, 2004. 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 four 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	0.02	-0.03
Reinforcing Ring – 3rd	0.05	-0.06
Reinforcing Ring – 4th	0.06	-0.04
Reinforcing Ring – 5th	0.05	-0.04
Reinforcing Ring – 6th	0.03	-0.03
Reinforcing Ring – Downstream	0.00	0.00

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

Station	**Z**	**X**	**Y**
Upstream	37.98	-10.20	-15.73
Downstream	174.97	-10.11	-15.77

Top Hat Flange: (CRM9003000-0000, 4/5)	**Z**	**X**
Upstream	40.54	0.10
2nd	56.31	0.11
3rd	149.29	0.14
Downstream	165.06	0.17