Jefferson Lab Alignment Group

Data Transmittal

TO: Tim Whitlatch and Brian Carpenter	**DATE :** May 7, 2003	
FROM: Chris Gould	**Checked:**	**#** Z862

Details:

The following are the results of the inspection of SNS vacuum vessel 09 performed the week of May 5, 2003. A right hand coordinate system was established with the central axis running through the upstream and downstream reinforcing rings. A constructed plane using the three top hat flanges controlled roll. 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	0.03	0.03
Reinforcing Ring – 3rd	0.04	0.02
Reinforcing Ring – 4th	0.00	0.00
Reinforcing Ring – Downstream	0.00	0.00

Straightness = 0.05

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

Station	**Z**	**X**	**Y**	**Angle**
1	0.40	-10.17	-15.81	32.8
2	20.50	-10.20	-15.78	32.9
3	104.42	-10.23	-15.73	33.0
4	109.50	-10.22	-15.76	33.0

Top Hat Flange: (CRM9003000-0000, 4/5)	**Z**	**X**
Upstream	31.73	0.07
Middle	47.52	0.06
Downstream	93.10	0.05