

# **Jefferson Lab Alignment Group**

## **DATA TRANSMITTAL**

**TO:** Tim Whitlatch and Brian Carpenter

**DATE:** Sep 23, 02

**FROM:** Richard Schwartz

**Checked:** # : Z814r

**DETAILS:**

The following are the results of the inspection of SNS vacuum vessel 03 performed the week of Sept. 16<sup>th</sup>, 2002. 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)

	<b>X</b>	<b>Y</b>
Reinforcing Ring – Upstream	0.00	0.00
Reinforcing Ring – 2 <sup>nd</sup>	-0.01	0.00
Reinforcing Ring – 3 <sup>rd</sup>	-0.03	-0.01
Reinforcing Ring – 4 <sup>th</sup>	0.00	0.01
Reinforcing Ring – Downstream	0.00	0.00

**Rail Position:**

(CRM9003000-0000,4/5)

<b>Station</b>	<b>Z</b>	<b>X</b>	<b>Y</b>
Upstream	11.00	-10.44	-15.63
Downstream	107.25	-10.34	-15.70

<b>Port Position</b>	<b>Z</b>	<b>X</b>	<b>Y</b>
(CRM9003000-0000 4/5 3D)	85.15	11.50	16.38

## DATA TRANSMITTAL (cont.)

# : Z814

DATE: Sept. 23, 2002

PAGE : 2 of 2

**Top Hat Flange:**  
(CRM9003000-0000, 4/5)

	Z	X	Y
Upstream	31.78	-0.02	-20.69
Middle	47.55	-0.03	-20.68
Downstream	93.11	-0.04	-20.68

**Weld Disk:**  
(CRM9003000-0002)

Upstream BL	3.87	17.32	-9.93
Upstream	3.87	-0.06	19.98
Upstream BR	3.87	-17.27	-10.05
2 <sup>nd</sup> BL	25.36	17.31	-9.94
2 <sup>nd</sup>	25.37	-0.08	19.96
2 <sup>nd</sup> BR	25.34	-17.28	-10.04
3 <sup>rd</sup> BL	54.28	17.29	-9.91
3 <sup>rd</sup>	54.28	-0.08	19.94
3 <sup>rd</sup> BR	54.27	-17.32	-10.05
4 <sup>th</sup> BL	74.46	17.23	-10.02
4 <sup>th</sup>	74.47	0.01	19.97
4 <sup>th</sup> BR	74.49	-17.34	-9.97
5 <sup>th</sup> BL	99.44	17.24	-10.02
5 <sup>th</sup>	99.45	0.03	19.97
5 <sup>th</sup> BR	99.47	-17.32	-9.98
Downstream BL	120.94	17.25	-10.01
Downstream	120.97	0.05	20.22
Downstream BR	120.97	-17.31	-9.99