

Jefferson Lab Alignment Group

DATA TRANSMITTAL

TO: Tim Whitlatch and Brian Carpenter

DATE: May 9, 2002

FROM: Chris Gould

Checked: # : Z767

DETAILS:

The following are the results of the inspection of SNS vacuum vessel 02 performed the week of April 29, 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)

	X	Y
Reinforcing Ring – Upstream	0.00	0.00
Reinforcing Ring – 2 nd	0.00	0.02
Reinforcing Ring – 3 rd	0.06	0.05
Reinforcing Ring – 4 th	0.06	0.02
Reinforcing Ring – Downstream	0.00	0.00

Rail Position – Measurements taken at one foot increments

(CRM9003000-0000,4/5)

Station	Z	X	Y
Upstream 0'	0.33	-10.11	-15.85
1'	12.24	-10.12	-15.87
2'	24.25	-10.11	-15.85
3'	36.18	-10.11	-15.81
4'	48.21	-10.18	-15.80
5'	60.23	-10.15	-15.79
6'	72.19	-10.15	-15.83
7'	84.24	-10.21	-15.77
8'	96.29	-10.21	-15.75
9'	108.08	-10.19	-15.77
Downstream 9' 1.5"	109.51	-10.20	-15.76

Port Position

	Z	X	Y
(CRM9003000-0000 4/5 3D)	85.38	11.38	16.37

DATA TRANSMITTAL (cont.)

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Top Hat Flange

(CRM9003000-0000, 4/5)

	Z	X	Y
Upstream	31.76	0.13	-20.69
Middle	47.54	0.19	-20.66
Downstream	93.12	0.11	-20.61

Weld Disk

(CRM9003000-0002)

	Z	X	Y
Upstream BL	3.86	17.31	-9.95
Upstream	3.85	-0.12	19.97
Upstream BR	3.93	-17.28	-10.13
2 nd BL	25.34	17.29	-9.92
2 nd	25.35	-0.06	19.96
2 nd BR	25.40	-17.21	-10.06
3 rd BL	54.28	17.32	-9.90
3 rd	54.28	-0.06	20.04
3 rd BR	54.32	-17.19	-10.06
4 th BL	74.67	17.35	-9.93
4 th	74.68	-0.10	19.99
4 th BR	74.66	-17.21	-10.02
5 th BL	99.68	17.34	-9.93
5 th	99.66	-0.04	19.99
5 th BR	99.65	-17.22	-10.02
Downstream BL	121.17	17.34	-9.92
Downstream	121.17	-0.04	20.00
Downstream BR	121.14	-17.25	-10.07

