

## Jefferson Lab Alignment Group

## **Data Transmittal**

**TO:** D. Kashy **DATE:** 09 Sep 2015

FROM: Kelly Tremblay Checked: #: B1670

**DETAILS:** data: inspection\hallb\torus12g\150826A

The data below is from the Torus magnet survey of August 25<sup>th</sup> and 26<sup>th</sup>. The table shows the as-found fiducial locations based on the hub line established from the survey. The origin is the coil case design zero as shown on drawing B00000-04-01-1101. The fiducials are located on the coil so that their z component is the only offset from the coil case surface. Subtracting or adding the z fiducial offset results in the Z coordinate for the case. The Z locations for the vacuum jackets as detailed in memo B1667, are shown. The Z values are subtracted from each other to show the distance (Delta VJ to Coil Case) between the coil case and the edge of the vacuum jacket. All units are millimeters.

Upstream Hub Locations relative found hub line and referenced to design 0,0										
Fiducial Location						Vac Jacket Zs		Delta VJ to Coil Case		
point	х	У	Z	Fid z o/s	Z cryo case		z end 1	z end 2	z end 1	z end 2
B_Hub_us	-148.7	85.0	500.6	7.9	508.6		409.5	409.8	-99.1	-98.8
C_Hub_us	-148.7	-86.6	500.5	7.9	508.4		410.0	411.1	-98.4	-97.3
D_Hub_us	0.0	-172.5	500.5	7.9	508.4					
E_Hub_us	148.2	-86.9	500.9	7.9	508.8		411.7	411.4	-97.1	-97.4
F_Hub_us	148.7	84.8	500.9	7.9	508.8		411.7	410.7	-97.1	-98.1
Av Z E			Av Z Edg	e Coil Case	508.6		•	•		
			std dev		0.2					

DownStream stream Hub Locations relative found hub line and referenced to design 0,0							)			
Fiducial Location						Vac Jacket Zs		Delta VJ to Coil Case		
point	Х	У	Z	Fid z o/s	Z cryo case		z end 1	z end 2	z end 1	z end 2
A_Hub_ds	0.6	147.5	2479.6	-23.0	2456.6		2538.5	2538.8	81.9	82.2
D_Hub_ds	-0.2	-147.0	2479.2	-22.9	2456.3		2538.7	2538.5	82.4	82.2
E_Hub_ds	126.1	-76.4	2480.1	-23.7	2456.4		2538.5	2537.6	82.1	81.2
F_Hub_ds	128.5	72.4	2481.4	-25.1	2456.3		2539.1	2539.2	82.8	82.9
Av Z Edg			e Coil Case	2456.4						

0.2

distance surf to surface					
average	1947.8				
design	1948.1				

std dev