



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** D. Kashy, C. Luongo, O. Pastor

**DATE:** 17 Apr 2015

**FROM:** Kelly Tremblay

**Checked:**

**# :** B1623

**DETAILS:**

data : step2a\hallb\torus12\150414a & 150415a

Coils B and C were checked in Hall B on April 14<sup>th</sup>, and 15<sup>th</sup>. Additional data was picked up on the blocks surrounding the Torus hub.

Coil C was installed approximately horizontal (270° clockwise looking downstream) and Coil B was at 210°. The two survey ball holes on the outer edge away from the hub were used to determine the angles formed between the coils. The data below marked 'US' and 'DS' are the upstream and downstream prisms.

The ideal coordinates based on drawing B00000-04-01-1101 rev D and the found locations (note offset 5/16" due to the survey prism used) are:

	Ideal			Found			deltas		
	X [mm]	Y [mm]	Z [mm]	X [mm]	Y [mm]	Z [mm]	dx [mm]	dy [mm]	dz [mm]
Coil C - US	3207.20	0.00	-506.95	3206.89	10.83	-506.62	-0.31	10.83	0.32
Coil C - DS	4212.84	0.00	878.25	4212.64	15.37	878.58	-0.20	15.37	0.32
Coil B- US	2106.42	-3648.43	-506.95	2117.01	-3640.27	-507.54	10.59	8.16	-0.60
Coil B- DS	1603.62	-2777.52	878.25	1611.34	-2770.43	877.23	7.72	7.08	-1.02

The angles from the hub to the prism locations:

	Angles from Hub		Angle Between Coils		
	Ideal	Found			
Coil C - US	0.0000	270.1935	US	60.0000	60.0132
Coil C - DS	0.0000	270.2090	DS	60.0000	60.0259
Coil B- US	60.0000	210.1803			
Coil B- DS	60.0000	210.1831			

The found 4 block top corners are attached to this document.

Additional information regarding the plane fit of the coil case is also attached.

The plane information for the OOPS on the front face is also included.