



Jefferson Lab Alignment Group

Data Transmittal

TO: B Miller

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Checked: (seh)

: B1751

DETAILS:

data: step1\hallb\161111a

The 12 GeV Hall B solenoid magnet cart was aligned on November 11th, 2016. The results are shown below. A positive X value is to the beam left; a positive Y value is high. Note that the cart was deliberately set approximately 1 millimeter high in anticipation of settlement caused by the solenoid's weight. The Y plane values shown account for the 1 mm shift. The bolt positions do not show the 1 mm shift. For reference, DS_Y plane design includes the 1 mm shift and was left 0.76 mm high of Cyril Wiggins design. Z positions were not taken into account as the cart was in an approximate position on the rails. Units are millimeters.

Name	TARGETS		MEASURED		Delta		
	X1 (mm)	Y1 (mm)	X2 (mm)	Y2 (mm)	dX (mm)	dY (mm)	Mag (mm)
DS_Left	54.09	-897.22	54.15	-896.94	0.06	0.28	0.29
DS_Right	-53.93	-896.98	-53.87	-896.67	0.06	0.31	0.32
DS_Y plane	0.00	-1059.95	1.11	-1060.19		-0.24	0.24
US_Left	511.83	-840.11	511.97	-838.54	0.14	1.57	1.58
US_Right	-511.82	-840.10	-511.72	-838.11	0.10	1.99	2.00
US_Y plane left	0.00	-1060.07	343.61	-1060.34		-0.27	0.27
US_Y plane right	0.00	-1060.07	-358.95	-1060.04		0.03	0.03