



Jefferson Lab Alignment Group

Data Transmittal

TO: M. Fowler, E. Sun

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Checked:

: C1705

DETAILS:

data: fiduc\hallc\shms\bender\mapper\160311a

The Hall C bender magnet mapper was surveyed with additional rod holders on March 10th, 2016. The data below shows the tube centers on the upstream and downstream ends of the rod holders. The fiducials on the bender magnet were re-measured March 9th, 2016 and were incorporated into this new transmittal. The revised coordinate system has been changed to reflect the bending angle of the magnet. The coordinates are based on the bender center with positive x being beam left, positive y being vertical up, and positive z being downstream. Units are millimeters. A map of the upstream positions is shown below.

	Upstream				DownStream		
Tube	X	Y	Z	Tube	X	Y	Z
UST1	29.4	59.9	-762.3	DST1	28.6	60.5	769.8
UST2	-29.8	1.0	-770.3	DST2	-30.0	0.7	771.9
UST3	29.2	-57.9	-759.6	DST3	30.1	-57.9	778.9
UST4	88.4	1.2	-764.5	DST4	88.4	1.9	775.8
UST5	29.1	0.8	-764.4	DST5	28.9	0.5	777.8
UST1A	10.4	57.7	-764.8	DST1A	9.4	57.4	775.2
UST1B	-5.0	50.1	-768.8	DST1B	-5.7	49.8	775.1
UST1C	-19.7	35.8	-764.3	DST1C	-17.9	33.5	774.9
UST1D	-26.8	20.4	-763.9	DST1D	-27.1	19.7	775.2
UST2A	-27.0	-18.7	-765.0	DST2A	-25.8	-20.0	773.9
UST2B	-17.8	-33.5	-763.1	DST2B	-17.8	-33.8	776.5
UST2C	-7.6	-46.6	-762.3	DST2C	-6.3	-46.5	777.7
UST2D	10.8	-56.0	-761.8	DST2D	11.6	-56.0	778.5
UST3A	46.6	-55.8	-761.2	DST3A	47.8	-55.1	778.6
UST3B	63.8	-47.3	-760.8	DST3B	64.5	-46.8	778.5
UST3C	77.1	-33.4	-761.3	DST3C	77.7	-32.1	778.3
UST3D	84.6	-17.9	-761.7	DST3D	84.4	-16.7	778.4
UST4A	84.8	18.2	-761.6	DST4A	84.8	19.5	778.8
UST4B	77.3	35.0	-761.6	DST4B	77.0	35.8	777.6
UST4C	64.0	47.9	-762.1	DST4C	63.3	49.3	777.6
UST4D	46.5	56.8	-763.5	DS4TD	45.9	57.4	776.3

USTX	88.3	60.4	-764.7		DSTX	87.7	61.2	777.1
USTXA	-29.3	59.6	-766.0		DSTXA	-30.3	58.5	774.0
USTXB	-29.8	-57.1	-762.8		DSTXB	-28.8	-56.2	777.5
USTXC	89.7	-58.5	-762.8		DSTXC	90.1	-56.0	777.0
UTT3C	131.1	94.4	-254.1					

Map of the upstream tubes:

