



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Gomez, S. Glamazdin, J. LeRose **DATE:** 05 Nov 2010

FROM: Kelly Tremblay **Checked:** (jcd) **# :** A1342

DETAILS: data: step2a\bsy\bsy10a\100827A

The Hall A Moller target was aligned August 27th, 2010. This transmittal summarizes some of the changes as requested by Javier Gomez and the final alignment from the August survey.

On April 4th, 2010, per J. Gomez's instructions, the Moller was moved beam left 0.3 millimeters, raised 1.1 mm and the pitch and yaw values were changed to -0.2521° and 142.6031° respectively. (ref. data transmittal A1280)

On August 27th, 2010, per J. Gomez's instructions, the Moller was moved beam left 0.2 millimeters, and raised 1.7 mm. The pitch was decreased -6.14 milliradians to -0.603896° and the yaw was increased 1.6 millirads (counter clockwise) with a final yaw value of 142.694803°. Original yaw was +142.50° and 0.00° pitch.

Note that the fiducialized alignment target values for the Moller were altered and not the ideal z/x/y beam coordinates. The rotational values for the Moller were changed (see below).

The deltas below reflect these changes and are the deltas from the ideal coordinates. A +z (bfs) indicates the component is too far downstream, a +x indicates the component is to the beam left and a +y means the component is high. A negative delta yaw indicates a clockwise rotation (when looked at from above), a positive delta pitch means the coil is pointing upwards from the upstream beam to the downstream beam, and a - roll indicates the coil is rotated counter clockwise from the ideal roll angle looking upstream.

For reference, the ideal coordinates in the Cebaf coordinate system with the accompanying rotational values are shown. The distance to the traditional Hall A target is also shown (Dist HA Targ).

Component	dZ (mm)	dX (mm)	dY (mm)	d Yaw°	d Pitch°	d Roll°
MOLLER	3.51	-0.22	0.41	-0.13191	0.00314	-0.00029
Current Ideal Values						
	Z (M)	X(M)	Y(M)	Yaw°	Pitch°	Roll°
MOLLER	-379.19952	-43.57176	100.02200	142.6948	-0.6039	0.0000
Dist HA Targ	17.4308					

