Jefferson Lab Alignment Group

Data Transmittal

TO: C. Wiggins, S. Stepanyan, B. Miller, E. Pasyuk, J. Brock		**DATE:** 07/25/2022
FROM: Elena Balan	**Checked:** SH	**# :** B2041

DETAILS:

M:\align\DATA\Step2B\HALLB\Polarized Target\220608A
M:\align\DATA\Step2B\HALLB\Polarized Target\220630A
M:\align\DATA\Step2B\HALLB\Polarized Target\220720A

Below are the survey results of the polarized target and the horizontal and vertical raster. The found coordinates are based on the CEBAF coordinate system. The Beam Following coordinates are the amount offset from the design (ideal) location, where a +X is beam left, a +Y is above and +Z is downstream from the ideal position. The delta angles are the difference from design shown in degrees.

- 6/08/2022 survey:

	CEBAF Coord. System			Beam Following					
Component	X[m]	Y[m]	Z[m]	X[mm]	Y[mm]	Z[mm]	Yaw[deg.]	Pitch[deg.]	Roll[deg.]
HBPOL22	-80.59957	103.35475	-398.79171	-0.43	-0.51	-29.82	0.00745	0.02836	-0.09626
IPM2H01	-80.60005	103.35509	-389.65565	0.05	-0.17	1393.22	-0.00745	0.00430	-0.02664
MQA2H00	-80.60010	103.35527	-386.67560	0.10	0.01	5.80	0.00945	0.00487	0.02893
R2H01H	-80.60020	103.35522	-393.29283	0.20	-0.04	-112.70	0.04784	-0.01031	0.03724
R2H01V	-80.59998	103.35511	-393.80136	-0.02	-0.16	-112.17	-0.00401	-0.00258	-0.06589

- 6/30/2022 survey:

	CEBAF Coord. System			Beam Following					
Component	X[m]	Y[m]	Z[m]	X[mm]	Y[mm]	Z[mm]	Yaw[deg.]	Pitch[deg.]	Roll[deg.]
HBPOL22	-80.59913	103.35495	-398.79173	-0.87	-0.31	-29.80	0.00229	0.02951	-0.09397

- 7/20/2022 survey:

	CEBAF Coord. System			Beam Following					
Component	X[m]	Y[m]	Z[m]	X[mm]	Y[mm]	Z[mm]	Yaw[deg.]	Pitch[deg.]	Roll[deg.]
HBPOL22	-80.59923	103.35481	-398.79164	-0.77	-0.450	-29.89	0.00315	0.02865	-0.07792
R2H01H	-80.60037	103.35519	-393.29270	0.37	-0.074	-112.83	-0.00573	-0.00745	0.05987
R2H01V	-80.59987	103.35506	-393.80115	-0.13	-0.205	-112.38	-0.04641	0.01031	-0.06474