



Jefferson Lab Alignment Group

Data Transmittal

TO: D. Kashy, T. Carstens

DATE: 08 Jan 2009

FROM: J. Dahlberg

Checked:

: B1209

DETAILS:

Data: Inspection\HallB\DVCSmapper\090106A

Below are the results from the DVCS mapping fixture alignment carried out on Jan 6, 2009. A coordinate system was established based on the magnet center using the fiducial data from July 2005. A +X is to the beam left, a +Z is downstream, and a +Y is up. Values are in millimeters. Points A, B, and C are fiducial survey targets 7.94mm downstream from the fixture face. The CL points are circles constructed from the three 1/4" fiducial holes at the downstream face.

LOCATION	Z	X	Y	NOTE
A	-2508.35	0.33	-99.66	
B	-2508.28	-99.78	0.29	
C	-2508.01	0.23	100.31	
CL	-2516.10	0.23	0.34	Upstream stop.
A	-2286.08	0.05	-99.49	
B	-2285.95	-100.08	0.49	
C	-2285.68	-0.05	100.50	
CL	-2293.83	-0.06	0.50	Additional measurement along rail.
A	374.68	0.33	-100.40	
B	375.15	-99.77	-0.42	
C	375.27	0.25	99.55	
CL	367.06	0.25	-0.44	Additional measurement along rail.
A	290.84	0.27	-100.37	
B	291.19	-99.94	-0.52	
C	291.24	-0.05	99.61	
CL	283.11	0.06	-0.35	Additional measurement along rail.
A	343.84	0.28	-100.40	
B	344.28	-99.88	-0.48	
C	344.32	0.07	99.59	
CL	336.17	0.11	-0.38	Final downstream stop location.
A	401.33	0.42	-100.43	
B	401.72	-99.71	-0.44	
C	401.82	0.32	99.57	
CL	393.60	0.29	-0.42	Original downstream stop location.
US Flange	-507.14	-0.05	-0.11	Upstream DVCS flange.
DNST Flange	226.98	-0.37	-0.88	Downstream DVCS flange projected onto the downstream face of the DVCS magnet.