



Jefferson Lab Alignment Group

Preliminary Data Transmittal

TO: Tim Whitlatch

DATE: 21 Nov 2013

FROM: Matt Walker

Checked:

: D1521

DETAILS:

The hall D tagger magnet mapper was inspected at various positions along the magnet. The movement deltas are listed below. +X is BL of center of the magnet poletip. +Z is downstream of the center of the magnet.

Vector Name	Begin [Inches]		End [Inches]		Delta [Inches]		MagXZ
	X	Z	X	Z	X	Z	
Home location deltas from fiduc data							
D	-43.434	22.835	-43.439	22.841	-0.006	0.006	0.008
B	-18.842	21.189	-18.871	21.188	-0.029	-0.002	0.029
E	-43.448	27.587	-43.442	27.596	0.007	0.009	0.011
A	-1.666	4.938	-1.705	4.913	-0.038	-0.024	0.045

Mapper moved 6.6" BL, 30" upstream from home

A	-1.705	4.913	4.892	-25.066	6.596	-29.979	30.697
B	-18.871	21.188	-12.260	-8.780	6.611	-29.968	30.688
D	-43.439	22.841	-36.828	-7.108	6.611	-29.948	30.669
E	-43.442	27.596	-36.826	-2.353	6.615	-29.949	30.671

Mapper moved 6" BL, 60" upstream from home

A	-1.705	4.913	4.278	-55.091	5.982	-60.004	60.302
B	-18.871	21.188	-12.867	-38.797	6.004	-59.985	60.285
D	-43.439	22.841	-37.434	-37.114	6.006	-59.955	60.255
E	-43.442	27.596	-37.430	-32.360	6.012	-59.956	60.257

Mapper moved 4.5" BR, 97" upstream from home

A	-1.705	4.913	-6.188	-92.089	-4.484	-97.002	97.106
B	-18.871	21.188	-23.334	-75.795	-4.463	-96.983	97.085
D	-43.439	22.841	-47.902	-74.112	-4.463	-96.953	97.055
E	-43.442	27.596	-47.898	-69.359	-4.456	-96.955	97.057

Mapper moved back to home position

A	-1.705	4.913	-1.705	4.932	-0.001	0.019	0.019
B	-18.871	21.188	-18.868	21.206	0.004	0.018	0.018
D	-43.439	22.841	-43.436	22.861	0.003	0.021	0.021
E	-43.442	27.596	-43.437	27.616	0.005	0.020	0.020