Jefferson Lab Alignment Group

Data Transmittal

TO: Joe Grames		**DATE:** 25 May 2012
FROM: Kelly Tremblay	**Checked:** (jcd)	**# :** L1456

DETAILS:

data: step2b\inj\120524A

Seven quadruples were measured in the injector and PEPPO beam lines on May 23/24th, 2012. The results are shown below. The as-found coordinates are based on the CEBAF coordinate system with units in meters. The beam following (BFS) are based on following the beamline and are the deltas from the ideal magnet locations (millimeters). 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.

The angular deltas for the magnets are also shown. A positive delta yaw indicates a counter 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 clockwise from the ideal roll angle looking upstream. The ideal yaw angles are shown for reference.

	As-Found (M)			bfs (mm)			Angular deltas			
Name	**x**	**y**	**z**	**dx**	**dy**	**dz**	**d yaw**	**d pitch**	**d roll**	**ideal yaw**
MQJ0L01	80.6003	100.0005	-248.0600	0.28	0.45	-0.54	-0.0203	-0.0656	-0.0232	0.0000
MQJ0L02	80.6000	100.0003	-245.0130	0.01	0.33	-7.49	-0.0447	-0.2470	-0.1198	0.0000
MQJ0L02A	80.6004	100.0002	-244.4090	0.35	0.20	-0.92	0.0175	0.0057	0.0014	0.0000
MQJ0L03	80.6002	100.0004	-239.2180	0.24	0.39	-3.23	-0.0811	-0.0891	0.0032	0.0000
MQJ0L03A	80.6001	100.0003	-238.5860	0.08	0.32	-4.49	0.0269	0.0203	0.0060	0.0000
MQD5D00	80.3112	100.0000	-242.6371	0.27	-0.04	-1.31	-0.1305	-0.0198	-0.0719	-25.0000
MQD5D01	80.1371	100.0002	-242.2660	-0.43	0.22	-0.33	0.0706	-0.1037	0.0602	-25.0000