

## Jefferson Lab Alignment Group

## **Data Transmittal**

**TO**: J. Gubeli **DATE**: 04/29/2019

FROM: Kelly Tremblay Checked: #: F1919

**DETAILS:** data: step2b\lerf\iso\190329a

Magnet MQX1X01 was aligned on March 29th, 2019. The results are shown below.

The ideal and found coordinates are shown in meters relative to the FEL coordinate system. The beam following coordinates (millimeters) are also shown and are described as follows: Positive x is to the beam left from ideal beam looking downstream; Positive y is the amount lower than beamline; negative z is amount upstream from the ideal position.

The angular displacements are shown in degrees. Positive yaw is the counter clockwise rotation about the Y axis; negative pitch is the clockwise rotation about the X axis (physics standard); positive roll is the clockwise rotation about the Z axis.

	Ideal			Found			Beam Following		
	x [m]	y[m]	z[m]	x [m]	y[m]	z[m]	dx[mm]	dy[mm]	dz[mm]
MQX1X01	19.36948	105.00000	39.90165	19.36977	105.00005	39.90235	0.087	0.046	-0.754

Angular displacements BFS						
dYaw	dPitch	dRoll				
0.04363	0.00974	0.00000				