

Jefferson Lab Alignment Group

Data Transmittal

TO: D. Higinbotham, J. LeRose DATE: 17 Feb 2011

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DETAILS:

Data: Aalign\hadron\2011\H020411a

Below are the results from the SRC Big Bite magnet and detector survey carried out on Feb 04, 2011. A right handed coordinate system was established based on the ideal target center and rotated 64.4 degrees clockwise from straight ahead beam. A +X is to the beam left, a +Z is downstream, and a +Y is up. A +yaw angle is counter clockwise looking from above and a +pitch angle is ccw looking from the beam right side. Values are in millimeters and degrees. The detector location is to the upstream set of detectors. The Z coordinate is to a bisected plane from the upstream and downstream faces, the Y is to the vertical center, and the X is to the center of the support frame. Also included are the fiducial points surveyed for the magnet and detector stack based on the ideal target center and straight ahead beam.

| LOCATION | Z | X | Υ | YAW | PITCH | ROLL |
|--|--|--|--|-----------------|------------------|-----------------|
| MAGNET CL DETECTOR | 1448.50 2458.7 | 2.34 0.9 | -1.01 419.9 | -0.241 0.429 | -0.346 25.506 | 0.095 -0.059 |
| FIDUCIALS | Z | x | Y | | | |
| BBMAG1 BBMAG3 BBMAG4 BBMAG5 BBMAG6 | -123.98 185.36 97.53 -126.20 108.81 | -1696.35 -2039.97 -2107.03 -1684.38 -2180.16 | 919.65 311.16 -291.16 -892.61 -896.00 | | | |
| BBDETA BBDETC BBDETD BBDETE BBDETF BBDETG BBDETH BBDETJ BBDETK | 1243.72 2280.38 1802.89 1262.53 840.87 1876.06 1308.84 1612.23 1006.06 703.67 | -3903.28 -3400.21 -3048.74 -3313.61 -3072.04 -2568.49 -1954.63 -2570.99 -2869.22 -2248.80 | -178.81 -181.05 921.09 917.95 1759.44 1757.02 1261.27 -178.71 -184.57 1263.78 | | | |