| Jefferson Lab Alignment Group Data Transmittal |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TO: T. Whitlatch |  |  |  |  |  |  | DATE: 10/06/2021 |  |  |
| FROM: Elena Balan |  |  |  |  | Checked: TPSIII |  |  | \# : D2008 |  |
| The ideal and found coordinates are shown in meters relative to the CEBAF coordinate system. The beam following coordinates (bfs - millimeters) are also shown and are described as follows: Negative x is to the beam right from ideal beam looking downstream; negative $y$ is the amount lower than beamline; negative $z$ is amount upstream from ideal target. 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. |  |  |  |  |  |  |  |  |  |
|  | Cebaf Coordinate Location [meters] |  |  | Beam Following [millimeters] |  |  | Angular Position [ degrees ] |  |  |
|  | X [m] | Y [m] | Z [m] | dX [mm] | dY [mm] | dZ [mm] | Yaw ${ }^{0}$ | Pitch ${ }^{\circ}$ | Roll ${ }^{\circ}$ |
| HDLHYD_Ideal | 80.60000 | 104.70000 | 398.78983 |  |  |  |  |  |  |
| HDLHYD | 80.60012 | 104.69990 | 398.78942 | 0.12 | -0.098 | -0.41 | 0.00315 | -0.00917 | -0.02005 |

