

Jefferson Lab Alignment Group

Data Transmittal

TO: G. Smith **DATE:** 17 Apr 2015

FROM: Chris Gould Checked: kt #: C1622

DETAILS: M:\align\Calcs\HallC\QWeak

Below are the coordinates for the Qweak Hydrogen target and the QTOR magnet. The Qweak data was collected as part of a post run survey carried out June 21st 2012. Two coordinate systems are reported to help clarify the data previously published. The first is in the CEBAF Mechanical system and the second is a beam following system relative to QTOR where a +Z is downstream, a +X is beam left.

| | Cebaf Mechanical (M) | | | QTOR Coordinate System (mm) | |
|--------------|----------------------|------------|-----------|-----------------------------|-------|
| | Z | х | YAW(deg) | Z | X |
| Qweak As-Fnd | -393.07965 | -128.29472 | -142.4832 | -6527.03 | -1.29 |
| QTOR As-Fnd | -398.25597 | -132.27068 | -142.4832 | 0.03 | 0.03 |

QTOR was installed before the target. Unfortunately, due to space requirements of the collimator, the target was forced to move upstream ~3cm. This information is reflected by the Hydrogen Target locations in data transmittals C1307, C1329, C1417 and C1468. The collimator found values reported in C1517 are relative to the "Ideal" Qweak location, not the as found location.