



Jefferson Lab Alignment Group

Data Transmittal

TO: Javier Gomez, Jesse Butler, Cynthia Keppel, Douglas Higginbotham

DATE: 04/30/2018

FROM: Steve Hardisty

Checked: TPS III

: A1860

DETAILS: :

data : aalign\hadron\2018\H043018A

Below are the results from the survey of the right spectrometer on April 30, 2018. The horizontal pointing value shows how much the central axis of the spectrometer misses the ideal target. This value is perpendicular to the spectrometer axis, not along the beam line. For the vertical pointing, a positive value indicates that the spectrometer is pointing above the target.

A graphical sketch is shown at the end of this transmittal

===== RESULTS ===== H043018A

The central ray of the spectrometer is at 48.823 degrees
The central ray is missing the defined target center by 4.00 [mm] Upstream
and -1.73 mm vertically [positive value is up]

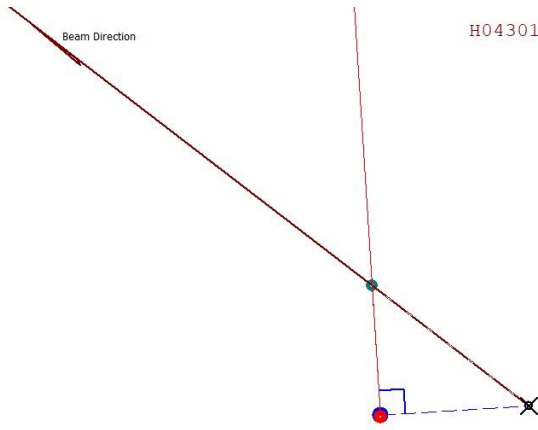
If the offset is corrected by secondary alignment, the spectrometer will be at 48.796 degrees

To achieve this optimal setting
make the following adjustments:
spectrometer will be at 48.796 degrees
Horizontal corrections:

Move rear jacks along tangent -4.08 mm Upstream

9 Par A posteriori value : 0.24 (mm)

H043018A



- Beam-Spec Intercept Point
- Beam-Spec Perpendicular Point
- Spectrometer Projected Target Point
- ✕ Straight-Ahead Target Point [ideal]

angles: delta : 48.82291 [degrees]
beam : 142.49998 [degrees]
spectrometer: 93.67707 [degrees]

perpendicular distance : 4.011 [mm]
target - intersect dis : 5.329 [mm]
found target - intersect dis : 3.551 [mm]
Spectrometer is -1.73 lower than ideal target [mm]

- Spectrometer Line
- Straight-Ahead Beam
- Perpendicular line