



Jefferson Lab Alignment Group

Data Transmittal

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DATE: 12 Mar 2018

FROM: Thom Singleton

Checked:

: A1854

DETAILS: :

data : aalign\hadron\2018\H031218A

Below are the results from the survey of the right spectrometer on March 12, 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 ===== H031218A

The central ray of the spectrometer is at 36.119 degrees

The central ray is missing the defined target center by 0.74 [mm] Downstream
and -2.25 mm vertically [positive value is up]

If the offset is corrected by secondary alignment, the spectrometer will be at 36.114 degrees

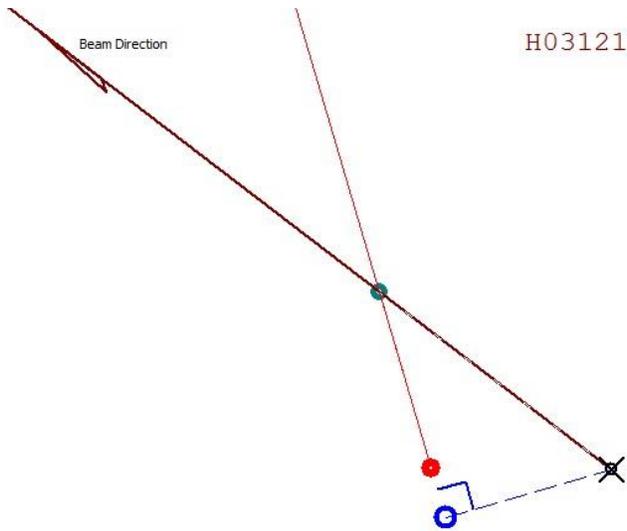
To achieve this optimal setting
make the following adjustments:
spectrometer will be at 36.114 degrees

Horizontal corrections:

Move rear jacks along tangent -0.75 mm Downstream

9 Par A posteriori value : 0.23 (mm)

H031218A



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

angles: delta : 36.11898 [degrees]
beam : 142.49998 [degrees]
spectrometer: 106.38100 [degrees]

perpendicular distance : 0.739 [mm]
target - intersect dis : 1.253 [mm]
found target - intersect dis : 0.795 [mm]
Spectrometer is -2.25 lower than ideal target [m

-  Spectrometer Line
-  Straight-Ahead Beam
-  Perpendicular line