# Jefferson Lab Alignment Group <br> DATA TRANSMITTAL 

TO: Ed Folts, Javier Gomez, John LeRose DATE: 30 Nov, 1999
FROM: Chris Curtis
Checked:
\# 565
DETAILS:
Below are the results from the spectrometer pointing surveys carried out on the Hadron arm on November 19 ${ }^{\text {th }}$ and $30^{\text {th }}$.
================= $\mathrm{RESULTS}===============\mathrm{H} 111999 \mathrm{~B}$
The central ray of the spectrometer is at 30.139 degrees.
It is missing the defined target center by .14 mm upstream, and $\quad-.34 \mathrm{~mm}$ vertically (positive $=u p$ ).

If the offset is corrected by secondary alignment, the spectrometer will be at 30.140 degrees.

To achieve this optimal setting, make the following adjustments:
Horizontal corrections:
Move rear jacks along tangent . 14 mm upstream.
Vertical corrections (positive = up):
Central jack: 1.14 mm . U/s rear jack: 1.61 mm . D/s rear jack: 2.30 mm .
*. $3 \mathrm{dd}=1.39 \quad$ *. $9 \mathrm{pr}=0.13$
==================RESULTS ================ H 113099 A
The central ray of the spectrometer is at 45.200 degrees.
It is missing the defined target center by .19 mm upstream, and .25 mm vertically (positive = up).

If the offset is corrected by secondary alignment, the spectrometer will be at 45.201 degrees.

To achieve this optimal setting, make the following adjustments:
Horizontal corrections:
Move rear jacks along tangent . 20 mm upstream.
Vertical corrections (positive = up):
Central jack: . 48 mm . U/s rear jack: . 51 mm . D/s rear jack: 1.94 mm .

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* .3 d d=1.35 \quad * .9 p r=0.10
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