

# Jefferson Lab Alignment Group

## DATA TRANSMITTAL

**TO:** Ed Folts, Javier Gomez, Arun Saha, John LeRose      **DATE:** 3 Dec, 1999

**FROM:** Chris Curtis      **Checked:** # 567

### DETAILS:

Below are the results from the spectrometer pointing surveys carried out on the Hadron and Electron arms on December 2<sup>nd</sup> and 3<sup>rd</sup>.

===== RESULTS ===== H120299A

The central ray of the spectrometer is at 16.553 degrees.  
It is missing the defined target center by 2.92 mm downstream,  
and -.40 mm vertically (positive = up).

If the offset is corrected by secondary alignment, the spectrometer will be at 16.533 degrees.

To achieve this optimal setting, make the following adjustments:

Horizontal corrections:

Move rear jacks along tangent 2.97 mm downstream.

Vertical corrections (positive = up):

Central jack: 1.58 mm.      U/s rear jack: 2.39 mm.      D/s rear jack: 3.17 mm.

\*.3dd = 1.41      \*.9pr = 0.13

===== RESULTS ===== E120399A

The central ray of the spectrometer is at -16.522 degrees.  
It is missing the defined target center by 2.56 mm upstream,  
and .14 mm vertically (positive = up).

If the offset is corrected by secondary alignment, the spectrometer will be at -16.540 degrees.

To achieve this optimal setting, make the following adjustments:

Horizontal corrections:

Move rear jacks along tangent 2.60 mm upstream.

Vertical corrections (positive = up):

Central jack: 1.39 mm.      U/s rear jack: 2.78 mm.      D/s rear jack: 3.11 mm.

\*.3dd = 1.10      \*.9pr = 0.11