## Jefferson Lab Alignment Group Data Transmittal

TO: Jay Benesch
FROM: Chris Curtis DATE: 14 Apr 2006

## DETAILS:

data: m: \align\data\step2a\bsy $\backslash \mathrm{bsy} 5 \mathrm{~b} \backslash 060119 \mathrm{a}$
data: m:\align\data\step2a\bsy\bsy7b\060119a
data: m:\align\data\step2a\bsy\bsy8b\060124a

Below are the results of the location survey of harps in line $B$. Since all of these components were measured in a local system (i.e. relative to the nearest quad, listed bold) only a DZ is given, together with a derived $Z$ coordinate. DS (distance along beam) is also given for components where the beamline is pitched. The ideal coordinates of the quads are shown in meters in the machine system with the center of the accelerator at $Z=0, X=0$ and $Y=100$. The $D Z$ and $D S$ are given in millimeters, with a positive DZ/DS being downstream. Accuracy is estimated at $+/-1 \mathrm{~mm}$.

| Component | Z (m) | X (m) | Y (m) | $\begin{aligned} & \text { DS } \\ & (\mathrm{mm}) \end{aligned}$ | $\begin{gathered} \mathrm{DZ} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { DX } \\ (\mathrm{mm}) \end{gathered}$ | $\begin{gathered} \text { DY } \\ \text { (mm) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| QA2C09 ctr | -316.5183 | -80.6000 | 100.5139 |  |  |  |  |
| HA2C09 ctr | -317.5541 |  |  | 1035.8 | 1034.0 | ** | ** |
| QA2C19 ctr | -351.5951 | -80.6000 | 103.2865 |  |  |  |  |
| HA2C19 ctr | -352.6318 |  |  | 1037.2 | 1036.7 | ** | ** |
| QA2C21A ctr | -359.7506 | -80.6000 | 103.3433 |  |  |  |  |
| OT2C21 ctr | -360.3488 |  |  | ** | 598.2 | ** | ** |
| HA2C21 ctr |  |  |  | ** | 804.9 | ** | ** |
| QA2C24 ctr | -374.4941 | -80.6000 | 103.3433 |  |  |  |  |
| Tagger Harp | -378.0733 |  |  | ** | 3579.2 | ** | ** |
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