



Jefferson Lab Alignment Group

Data Transmittal

TO: J.P. Chen, J. LeRose

DATE : Jun 17, 2003

FROM: James Dahlberg

Checked:

DT_A870

Details:

Below are the results of the survey performed on the hadron (right) septum sieve slits carried out on May 29th, 2003. The ideal X values are calculated using the as found Z distance of the slit downstream from the nominal He3 target for the 6° beam line, i.e. ($Z \times \sin 6^\circ$). The survey was performed while the small hole slit was in place, and as a result, the large hole slit location is a calculated position using the fiducial data. This predicted location relies on the repeatability of the slit holder when it is attached to the slit box. A 12.7mm vertical correction is also applied for the large hole shim plate.

Also included is the location of the large aperture measured on the slit box after it was removed from the pivot area. The coordinates are generated using the as found location of the small slit tooling balls during the post-run survey. Note that these measurements are to the downstream face of the aperture. A +Z is downstream, +X is to the beam left, and +Y is up.

SIEVE SLITS MEASURED ON PIVOT

	Z	X	Y
As-found (small hole)	796.17	-82.41	1.85
Ideal		-83.22	0.00
Delta		0.81	1.85
Predicted as-found (large hole)	795.89	-83.89	-10.71
Ideal		-83.19	-12.70(shim cor.)
Delta		-0.70	1.99

SIEVE SLIT LARGE APERTURE

	Z	X	Y
Downstream face of large aperture.	816.52	-84.99	3.90
Ideal		-85.35	0.00
Delta		0.36	3.90