



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** J. P. Chen, J. LeRose, A. Deur

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**FROM:** J. Dahlberg

**Checked:**

**#** A893

**DETAILS:**

Below are the results of the Sep 3<sup>rd</sup> post run survey performed on the Hall A target cell, sieve slits, and collimators. The deltas shown represent the offset from ideal (in millimeters and degrees). A positive X indicates the target is to the beam left, positive Y is up, and positive Z is downstream. A positive pitch is counter-clockwise looking from the beam right, and a positive yaw is clockwise looking from above.

Target Cell	Del Z	Del X	Del Y	Pitch	Yaw
Tgt. cell warm.	-0.83	1.42	-0.34	0.21	-0.09
Ref. tgt. cell warm.	0.26	0.44	105.23	0.09	-0.21
Tgt. cell cool.	-0.96	0.53	-0.16	-0.05	0.18
Ref. tgt. cell cool.	0.11	0.11	105.88	0.00	-0.11

**HADRON SEPTUM SIEVE SLITS AT 9°**

The ideal X values for the slits are calculated using the as found distance of the slit from the nominal He3 target, i.e. (Dist x sin 9°). For the reported locations and deltas the Z-axis runs along the main Hall A beam line, not the 9° line.

	Z	X	Y
As-found (small hole)	789.92	-125.26	1.86
Ideal		-125.11	0.00
Delta		-0.15	1.86
As-found (large hole)	788.83	-125.62	1.98
Ideal		-124.96	0.00
Delta		-0.66	1.98

**TARGET COLLIMATOR BLOCKS**

The coordinates are based on the pre-determined location relative to the tooling balls, which were used for positioning into the beam line.

Collimator Block	Z	X
BRS9U upstream beam left corner.	22.96	-12.63
BRS9U downstream beam left corner.	52.49	-18.41
BRS9D upstream beam right corner.	301.64	-31.33
BRS9D downstream beam right corner.	331.49	-35.38