



Jefferson Lab Alignment Group

Data Transmittal

TO: Joe Grames

DATE: 30 Jul 2008

FROM: Chris Curtis

Checked:

: L1176

DETAILS:

Below are the results of the location surveys of the load lock gun fiducials from Aug. 8, 2007 and from 24 July, 2008. Coordinates are in meters with Z=80000, X=60000 and Y=2100 defining the center of the accelerator. Deltas are in millimeters in a right handed system with +Z being downstream, +X to the beam right, and +Y being above ideal beam elevation. The location of tooling balls A-F is given, as well as the location of the derived center (based on upstream and downstream flanges). Yaw, pitch and roll is also given in degrees, where positive yaw is counter clockwise from above; positive pitch is counter clockwise from beam right; and positive roll is clockwise looking downstream.

For the recent survey the location of the laser line irises is also shown, together with the DY in millimeters.

2B\070808b:	Z	X	Y	DZ	DX	DY
LLOCTBA	79736.93606	60081.23759	2100.00334	-0.134	0.192	0.010
LLOCTBB	79736.85150	60081.09983	2100.16023	-0.175	0.036	-0.090
LLOCTBC	79736.88209	60080.92929	2100.00607	-0.108	-0.060	-0.340
LLOCTBD	79737.08128	60080.87636	2100.00491	-0.092	-0.004	-0.240
LLOCTBE	79737.12438	60081.02684	2100.16012	-0.065	0.127	-0.060
LLOCTBF	79737.16218	60081.17690	2100.00275	-0.159	0.206	-0.010
	Yaw	Pitch	Roll			
LLOC ctr	0.009	-0.007	0.040	-0.126	0.122	-0.124

2B\080724a:	Z	X	Y	DZ	DX	DY
LLOCTBA	79736.93065	60081.23794	2099.99473	-5.450	-0.871	-8.600
LLOCTBB	79736.84327	60081.10091	2100.15074	-8.404	-1.052	-9.580
LLOCTBC	79736.87353	60080.93037	2099.99658	-8.656	-1.233	-9.830
LLOCTBD	79737.07221	60080.87540	2099.99711	-8.604	-3.279	-8.040
LLOCTBE	79737.11542	60081.02507	2100.15299	-8.262	-3.902	-7.190
LLOCTBF	79737.15617	60081.17496	2099.99604	-5.462	-3.224	-6.720
	Yaw	Pitch	Roll			
LLOC ctr	-0.579	0.471	0.250	-7.047	-1.827	-8.504
Laser US:	79737.3334	60080.9661	2099.9970			-7.74
Laser DS:	79738.0640	60080.7719	2100.0012			-3.54