

Jefferson Lab Alignment Group

Data Transmittal

TO: Jay Benesch DATE: 04 Apr 2006

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DETAILS:

Below are the results of the location survey of harps in line A. The Z, X, Y coordinates are given in meters for the components which were surveyed directly from the survey monuments, and not for those surveyed in a local system (i.e. relative to a quad). These are in the machine system with the center of the accelerator at Z=0, X= 0 and Y=100 meters. The DS (distance along beamline) is given in millimeters to the center of the nearest quadrupole (listed bold), with a positive DS being downstream. The DX and DY are also in millimeters with respect to ideal beam with a positive DX to the beam left, and a positive DY up. In addition, for the components in Hall A, the distance to the target is given in millimeters (DS Tgt). For OTR OR1H04, the approximate Z for the camera is given. Accuracy is approx +/- 1mm.

				DS Tgt	DS	DX	DY
Component	Z (m)	X (m)	Y (m)	(mm)	(mm)	(mm)	(mm)
QA1C07 ctr	-307.6756	-78.7855	100.0220				
HA1C07A ctr		Local			1348.2		
QA1C08 ctr	-313.7661	-78.4450	100.0220				
HA1C07B ctr		Local			-781.2		
QA1C09 ctr	-318.9423	-77.9721	100.0220				
HA1C09 ctr	010.0420	Local	100.0220		-371.2		
11/11000 00		Local			071.2		
QA1C12 ctr	-334.0576	-74.2608	100.0220				
HA1C12 ctr		Local			355.2		
OR1C12 ctr		Local			560.5		
QA1C17 ctr	-354.0774	-62.8486	100.0220				
HA1C17ctr	-353.8340	-63.0363	100.0218		-307.4	0.7	0.0
QA1C18 ctr	-354.7121	-62.3616	100.0220				
HA1C18A ctr	-355.4397	-61.8014	100.0224		918.3	0.5	0.6
HA1C18B ctr	-358.3835	-59.5455	100.0213		4627.0	2.5	-0.9
QA1H01 ctr	-378.5127	-44.0988	100.0220				
HA1H00 ctr	-374.3222	-47.3136	100.0231	-23581.6	-5281.6	-0.4	1.1
QA1HA4	-386.1482	-38.2399	100.0220				
HA1H03Actr	-387.2025	-37.4375	100.0221	-7350.8	1325.0	0.4	0.0
HA1H03Bctr	-391.2730	-34.3139	100.0221	-2219.9	6455.8	0.0	-0.5
OR1H04	-390.9064	-34.5878	100.0214	-2677.5	5998.2	-1.0	-0.4