



Jefferson Lab Alignment Group

Data Transmittal

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Checked:

: C1250

DETAILS:

Data: Step2b\HALLC\Hks_Hes\...(see below)

Below are the results of the HKS/HES post run survey carried out during the month of November, 2009. A +X (in millimeters), is to the beam left from ideal, a +Z is downstream, and a +Y is above. A +yaw angle (in degrees), is counter clockwise looking from above, a +pitch is ccw looking from the beam right, and a +roll is cw looking from upstream. The HES, and HKS detectors were surveyed in using the dipole fiducials, therefore, they are relative to the dipole X and Y centerline. The Z values are from the downstream of the dipole steel. For the detector Z measurements, the drift chambers, the AC chambers and the HWC1 chamber on the HKS are to the center. All other Z measurements are to the downstream face of the support frames.

LOCATION	Z	X	Y	YAW	PITCH	ROLL	DATA
SPLITTER	0.87	0.22	-0.97	-0.034	-0.040	0.012	091102b
<u>HES</u>							
Q1	0.74	0.09	0.40	-0.002	-0.059	0.001	091111a
Q2	1.20	0.04	-0.50	-0.020	-0.067	0.002	"
Dipole	-0.16	-0.15	-1.55	0.000	0.049	-0.013	"
Enge	1349.97	-0.17	-0.09	-0.021	-0.013	-0.007	091106a
Det. 2	1656.85	7.36	-9.58	-0.047	-0.037	0.039	"
Hod1 dnst frame	1816.5	0.1	1.1	-0.117	-0.482	0.025	"
Hod2 dnst frame	2117.1	0.5	0.9	-0.093	-0.254	-0.004	091105a
<u>HKS</u>							
Q1	-0.58	-0.22	-1.19	-0.017	0.025	0.012	091111a
Q2	-0.77	-0.63	-0.86	-0.003	0.021	0.018	"
Dipole	0.11	-0.57	-0.35	0.006	-0.001	0.008	"
HDC1	1870.99	-50.65	-1.60	0.005	0.036	0.021	091110a
HDC2	2872.70	-57.68	7.40	0.022	0.098	-0.032	"
1X dnst frame	3131	-56	0				091109a
1Y dnst frame	3341	-60	2				"
AC1	3538	7	6				"
AC2	3854	-66	5				"
AC3	4174	-142	4				"
2X dnst frame		-79	0				"
HWC1 frame cl		-77	-4				"
HWC2 dnst frame		-63	1				"