



Jefferson Lab Alignment Group

Data Transmittal

TO: A. Dipette

DATE: 17 Apr 2012

FROM: Kelly Tremblay

Checked: (tps)

: U1444

DETAILS:

data : inspection\12GeV\vacuumChamber\120312a

Various beam pipe jigs and some beampipes were measured in the test lab on March 12th, 2012. The data shown below is a summary of the results. Measurements beginning with a J are the jig observations while the beampipe measurements begin with a number which was etched on the pipes. All measurements were repeated with a 'A' at the end of the measurement name and a 'B' for the second measurement set. Some measurements have a 'C' which represents a third set of measurements. The Jigs had the radius etched on them. For example J_1122 corresponds to a radius of 1122 inches. Fitness is a statistic returned from the software indicating how well the radius was determined from the observed points. The column labeled 'Data Points' indicates how many points were scanned to determine the radius. Units are inches.

Measurement Name	Radius	Fitness	Data Points
1042-1A	134.075	0.028	65
1042-1B	134.347	0.028	65
1044-1A	370.165	0.019	127
1044-1B	370.189	0.016	126
1048-1A	628.181	0.003	64
1048-1B	628.196	0.003	63
J_1122A	1105.749	0.015	123
J_1122B	1107.149	0.019	118
J_1122C	1108.701	0.015	109
J_118A	118.335	0.009	58
J_118B	118.457	0.012	53
J_126A	125.941	0.007	51
J_126B	126.385	0.008	59
J_234A	235.995	0.010	58
J_234B	236.347	0.007	53
J_242A	244.854	0.012	59
J_242B	245.780	0.010	55
J_242C	244.815	0.009	63
J_3589A	3573.862	0.008	78
J_3589B	3599.851	0.007	72
J_3589C	3549.883	0.008	77
J_360A	356.784	0.016	124
J_360B	358.083	0.014	109

Measurement	Radius	Fitness	Data Points
J_368A	367.892	0.017	108
J_368B	367.628	0.015	113
J_422A	424.939	0.012	58
J_422B	424.440	0.009	56
J_690A	693.824	0.017	163
J_690B	693.893	0.017	162
J_698A	699.482	0.019	199
J_698B	699.307	0.029	177
J_843A	838.322	0.012	134
J_843B	838.608	0.011	140

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