Jefferson Lab Alignment Group

Data Transmittal

TO: S. Mandal | **DATE:** 07 May 2015

FROM: Chris Gould | **Checked:** | **# :** B1633

DETAILS: M:\align\DATA\Inspection\HallB\SVT\Region 4\150505A

Below are the results of the recent Hall B SVT Region 4 inspection. The coordinate system was established using the datums described in drawing B000000101-7200 then rotated 15 degrees so that Cu 1 module was rotated to the top position. The first table shows the positions of each of the inspected features. The second table shows the angles relative to module 1 and as well as the rotation angles of each module plane.

	Measured (mm)					Ideal (mm)					Delta (mm)			
	X	Y	Z	Diam.		X	Y	Z	Diam.		X	Y	Z	Diam.
FID 1	-30.186	171.357	0.000			-30.213	171.347	0.000			0.027	0.010	0.000	
FID 2	111.816	133.294	0.000			111.839	133.284	0.000			-0.023	0.010	0.000	
FID 3	30.203	-171.357	0.000			30.213	-171.347	0.000			-0.010	-0.010	0.000	
FID 4	-111.830	-133.278	0.000			-111.839	-133.284	0.000			0.009	0.006	0.000	
Cu 1	-0.042	161.525	474.234	2.983		0.000	161.315	474.240	2.995		-0.042	0.210	-0.006	-0.012
Cu 2	80.663	139.916	474.266	2.956		80.658	139.703	474.240	2.995		0.005	0.213	0.026	-0.039
Cu 3	139.786	80.856	474.295	2.965		139.703	80.657	474.240	2.995		0.083	0.199	0.055	-0.030
Cu 4	161.431	0.144	474.360	2.978		161.315	0.000	474.240	2.995		0.116	0.144	0.120	-0.017
Cu 5	139.855	-80.555	474.462	2.986		139.703	-80.657	474.240	2.995		0.152	0.102	0.222	-0.009
Cu 6	80.758	-139.622	474.559	2.967		80.658	-139.703	474.240	2.995		0.100	0.081	0.319	-0.028
Cu 7	0.036	-161.157	474.641	2.983		0.000	-161.315	474.240	2.995		0.036	0.158	0.401	-0.012
Cu 8	-80.661	-139.517	474.651	2.964		-80.658	-139.703	474.240	2.995		-0.003	0.186	0.411	-0.031
Cu 9	-139.814	-80.495	474.546	2.970		-139.703	-80.657	474.240	2.995		-0.111	0.162	0.306	-0.025
Cu 10	-161.512	0.214	474.432	2.969		-161.315	0.000	474.240	2.995		-0.197	0.214	0.192	-0.026
Cu 11	-139.881	80.892	474.325	2.978		-139.703	80.657	474.240	2.995		-0.178	0.235	0.085	-0.017
Cu 12	-80.778	139.965	474.259	2.983		-80.658	139.703	474.240	2.995		-0.120	0.262	0.019	-0.012
PEEK 1	-0.032	161.462	487.496	2.977		0.000	161.315	487.440	2.995		-0.032	0.147	0.056	-0.018
PEEK 2	80.687	139.939	487.479	2.962		80.658	139.703	487.440	2.995		0.029	0.236	0.039	-0.033
PEEK 3	139.734	80.872	487.548	2.957		139.703	80.657	487.440	2.995		0.031	0.215	0.108	-0.038
PEEK 4	161.383	0.213	487.612	2.974		161.315	0.000	487.440	2.995		0.068	0.213	0.172	-0.021
PEEK 5	139.806	-80.478	487.676	2.980		139.703	-80.657	487.440	2.995		0.103	0.179	0.236	-0.015
PEEK 6	80.716	-139.486	487.872	2.953		80.658	-139.703	487.440	2.995		0.058	0.217	0.432	-0.042
PEEK 7	0.070	-161.098	487.957	2.971		0.000	-161.315	487.440	2.995		0.070	0.217	0.517	-0.024
PEEK 8	-80.637	-139.582	487.856	2.979		-80.658	-139.703	487.440	2.995		0.021	0.121	0.416	-0.016
PEEK 9	-139.716	-80.581	487.804	2.967		-139.703	-80.657	487.440	2.995		-0.013	0.076	0.364	-0.028
PEEK 10	-161.384	-0.025	487.730	2.869		-161.315	0.000	487.440	2.995		-0.069	-0.025	0.290	-0.126
PEEK 11	-139.777	80.753	487.557	2.949		-139.703	80.657	487.440	2.995		-0.074	0.096	0.117	-0.046
PEEK 12	-80.679	139.769	487.541	2.964		-80.658	139.703	487.440	2.995		-0.021	0.066	0.101	-0.031
FLANGE	-0.004	0.023	0.000	355.621		0.000	0.000	0.000	355.600		-0.004	0.023	0.000	0.021
Cu Circle	-0.010	0.136	474.419	322.880		0.000	0.000	474.240	322.630		-0.010	0.136	0.179	0.250
Peek Circle	0.014	0.147	487.677	322.722		0.000	0.000	487.440	322.630		0.014	0.147	0.237	0.092
Fid Circle	0.001	0.004	0.000	347.978		0.000	0.000	0.000	347.980		0.001	0.004	0.000	-0.002

Angles(degrees)	Measured	Ideal	delta				RX	RZ	Flatness
Cu 1-2	29.922502	30.000000	-0.077498			Cu 1	89.974160	90.122155	0.003800
Cu 1-3	59.919631	60.000000	-0.080369			Cu 2	90.005157	90.107372	0.003680
Cu 1-4	89.967256	90.000000	-0.032744			Cu 3	90.054374	90.120201	0.005052
Cu 1-5	119.901684	120.000000	-0.098316			Cu 4	90.006637	90.122034	0.004237
Cu 1-6	150.052042	150.000000	0.052042			Cu 5	90.072180	90.075417	0.005174
Cu 1-7	179.892108	180.000000	-0.107892			Cu 6	89.921700	90.038170	0.001538
Cu 1-8	150.050580	150.000000	0.050580			Cu 7	89.963796	89.985231	0.005927
Cu 1-9	120.109385	120.000000	0.109385			Cu 8	90.024843	89.969657	0.003891
Cu 1-10	90.019203	90.000000	0.019203			Cu 9	90.083681	90.026031	0.002527
Cu 1-11	60.049533	60.000000	0.049533			Cu 10	89.993572	90.101569	0.002380
Cu 1-12	29.970638	30.000000	-0.029362			Cu 11	90.023838	90.123941	0.002567
PEEK 1-2	30.076480	30.000000	0.076480			Cu 12	89.944866	90.135233	0.002462
PEEK 1-3	60.109973	60.000000	0.109973			Peek 1	90.109149	90.040394	0.002606
PEEK 1-4	90.033647	90.000000	0.033647			Peek 2	90.032716	90.110008	0.010285
PEEK 1-5	120.152766	120.000000	0.152766			Peek 3	89.999171	90.045448	0.004191
PEEK 1-6	150.080309	150.000000	0.080309			Peek 4	90.075512	90.004704	0.004004
PEEK 1-7	179.862663	180.000000	-0.137337			Peek 5	89.956377	90.012591	0.010834
PEEK 1-8	149.942204	150.000000	-0.057796			Peek 6	90.028835	89.911612	0.005315
PEEK 1-9	119.935970	120.000000	-0.064030			Peek 7	90.538217	90.044309	0.004613
PEEK 1-10	89.940712	90.000000	-0.059288			Peek 8	90.051384	89.994389	0.002537
PEEK 1-11	59.850110	60.000000	-0.149890			Peek 9	90.045123	89.974417	0.003307
PEEK 1-12	29.896866	30.000000	-0.103134			Peek 10	90.049871	89.994806	0.002266
						Peek 11	89.959296	90.086676	0.009670
						Peek 12	90.006037	90.046204	0.005089