Jefferson Lab Alignment Group

Data Transmittal

TO: T. Whitlatch		**DATE:** 13 May 2016
FROM: J. Dahlberg	**Checked:**	**# :** D1715 r

DETAILS: Data: Step2b\HallD\solenoid\160511a, target\160506a, CDC\160511a, FDC\160509a

Below are the results from the Hall D May post run surveys. Values are listed in machine coordinates (Meters). Where indicated with an (**M**), features were measured directly as check points on original fiducial data which were used to calculate locations. A + yaw angle (degrees), is counter clockwise looking from above, a + pitch angle is ccw from the beam right, and a + roll is cw looking from upstream. A coordinate with 3 decimal places indicates the Z is not defined accurately.

COMPONENT	Z	X	Y	YAW	PITCH	ROLL
SOLENOID CL	400.0278	80.5997	104.7000	0.0258	0.0135	0.0026
M Upst steel	397.6306					
M Dnst steel	402.4252					
CDC(revised corr CL)	399.0646	80.6000	104.6992	0.0080	-0.0218	0.0450
M Upst side ring	398.0088					
TARGET CL	398.7717	80.5999	104.7000	-0.0014	-0.0118	0.0582
Upst g10 flange	398.5191					
Dnst end cell	398.9218					
START COUNT CL	398.7710	80.6005	104.7007	0.1266	-0.1816	0.0590
Dnst end	399.0948	80.6012	104.6996			
M Dnst end	399.0941	80.6020	104.6999			
M Upst flange	398.503	80.6003	104.7014			
M Upst cone	398.918	80.6005	104.7016			
M Flng at cent pin	398.4272	80.6002	104.7014			
M Upst flng-dnst side	398.2093	80.5999	104.7015			
Mid flng-upst side	398.4217	80.6001	104.7034			
SCATT CHAMBER	398.7736	80.6009	104.7012	0.1175	-0.0461	0.0584
Dnst end	398.9702	80.6013	104.7010			
M Dnst end	398.9706	80.6008	104.7014			
M Upst cylinder	398.579	80.6006	104.7014			
M Dnst cylinder	398.931	80.6008	104.7014			
Upst flng-dnst side	398.4317	80.6001	104.7015			
M Upst flng-dnst side	398.4317	80.6002	104.7010			
FDC CL	399.8885	80.5991	104.6997	0.0407	0.0063	-0.0086
M Dnst Al bolt plate	401.6148					