



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** B. Zihlmann, T. Whitlatch

**DATE:** 18 Mar 2016

**FROM:** J. Dahlberg

**Checked:**

**# :** D1706

**DETAILS:**

Data: 2b\HD\Tagger\140903a, 150209a, 140930a, 150908b

2b\NECR\LineD\140924a, 160311a

Below are the results from the most recent surveys carried out on the Line D tagger area quad/BPM. Listed are the as-set/found machine coordinates, along with the horizontal and vertical offsets from ideal beam center. A +X is to the beam left from ideal, a +Z is downstream, and a +Y is above. Machine coordinates are in meters, offsets are in millimeters and degrees. A +yaw angle is counter clockwise looking from above, a + pitch is ccw looking from the beam right side, and a + roll is cw looking from the upstream.

**MACHINE COORDINATES**

LOCATION	Z	X	Y	DATE
MQP5C08	271.51979	80.60002	104.70003	140903
IPM5C08	271.16124	80.60077	104.69903	140903
MQP5C09	275.02064	80.59999	104.70020	140903
IPM5C09	274.22013	80.59942	104.69920	140903
MQP5C10	278.52626	80.59998	104.70015	140903
IPM5C10	277.72710	80.60054	104.70062	140903
MQP5C11	282.03179	80.60002	104.70007	140903
IPM5C11	281.23650	80.60006	104.69780	140903
IPM5C11A BOX	283.51404	80.59991	104.70018	140924
IPM5C11B	294.93825	80.59972	104.69851	160311
IPMAD00 BOX	297.81904	80.60002	104.69999	140930
MQPAD00	300.16491	80.60002	104.69962	150908

**OFFSETS FROM IDEAL**

LOCATION	Z	X	Y	YAW	PITCH	ROLL
MQP5C08	0.05	0.02	0.03	-0.0166	0.0229	0.0017
IPM5C08		0.77	-0.97	0.9274	-0.2005	0.3724
MQP5C09	-0.10	-0.01	0.20	-0.0115	-0.0014	-0.0006
IPM5C09		-0.58	-0.80	0.1347	-0.0837	-0.3615
MQP5C10	0.02	-0.02	0.15	0.0003	-0.0052	0.0140
IPM5C10		0.54	0.62	-0.1421	-0.3177	-0.5833
MQP5C11	0.05	0.02	0.07	0.0046	-0.0052	0.0281
IPM5C11		0.06	-2.20	-0.5790	0.4632	-5.1538
IPM5C11A BOX	9.69	-0.09	0.18	-0.0034	-0.0080	0.0201
IPM5C11B		-0.28	-1.49	-0.1421	-0.1455	0.6162
IPMAD00 BOX	-0.01	0.02	-0.01	0.0037	0.0020	-0.0100
MQPAD00	0.21	0.02	-0.38	0.0100	0.0264	-0.0100