

LINE/HALL D Feb 2016 SURVEY REPORT

Note: The as set offsets are relative to the machine coordinate used for alignment. A +X is to the beam left, +Z is downstream, +Y is above. A + yaw angle is ccw looking from above, a + pitch angle is ccw looking from the beam right side, and a + roll angle is cw looking from upstream.

DISCRIPTION	COMPONENT	DWG IDEAL	Measured MACHINE COORDINATE(M)			DELTA ANGLE (DEG)			ENCODER/STEP COUNT					
			Z	X	Y	YAW	PITCH	ROLL	V WIRE	H WIRE	TGT1	TGT2	TGT3	
BPMBOX US TAGGER SHIELD WALL	PM5C11A		283.51404	80.59991	104.70018	-0.00344	-0.0080	0.0201						
BPMBOX DS TAGGER SHIELD WALL	PM5C11C		297.81904	80.60002	104.69999	0.00372	0.0020	-0.0100						
TAGGER GONIOMETER FOIL	TAGGON		299.08967	See "Goni Foils-Diamonds" sheet in this file						Hovanes has data for each diamond and foil				
GONIOMETER DIAMONDS			299.09067						see "Goni Foils-Diamonds" Sheet					
AMORPHOUS RADIATOR	TAGRAD		299.71413	80.60026	104.69953	-0.13780	-0.0089	0.0089	5565.55	10259.55	17143.53	20945.13	24749.35	
TAGGER QUAD (MQPAD00)			300.16491	80.60002	104.69962	0.01003	0.0264	-0.0100						
TAGGER MAGNET - pole center	HDTAGG		305.38838	80.30233	104.69937	-6.49920	0.0034	-0.0003						
TAGGER MAGNET - Pole entrance			302.28651											
HODOSCOPE PLT1 US BR TOP	HODPL1		303.09970	79.71819	104.77053	-8.03674	-0.0066	-0.0560						
HODOSCOPE PLT2 US BR TOP	HODPL2		304.38832	79.53609	104.77063	-8.04112	-0.0067	-0.0933						
HODOSCOPE PLT3 US BR TOP	HODPL3		305.67002	79.35449	104.77080	-8.05000	0.0172	-0.0373						
HODOSCOPE PLT4 US BR TOP	HODPL4		306.66042	79.21476	104.77088	-8.05000	-0.0136	-0.0933						
HODOSCOPE PLT5 US BR TOP	HODPL5		307.70464	79.06703	104.77058	-8.04450	0.0137	-0.1307						
HODOSCOPE PLT6 US BR TOP	HODPL6		308.89940	78.89787	104.77030	-8.06432	0.0334	-0.1120						
HODOSCOPE PLT7 US BR TOP	HODPL7		310.14345	78.72182	104.77125	-8.05939	-0.0235	0.1120						
HODOSCOPE PLT8 US BR TOP	HODPL8		311.56453	78.52614	104.77093	-8.04356	-0.0161	0.0187						
TAGGER MICROSCOPE US CENTER	HDMICR		306.52268	79.43367	104.69879	-8.04380	0.0183	-0.0779						
COLLIMATOR CAVE PROFILER			374.27000		104.70048	0.00000								
COLLIMATOR CAVE PIN HOLE COLLIMATOR	MCOAD01		374.48534	80.65170	80.69964	-0.02206	0.0218	0.0364						
COLLIMATOR CAVE 2ND COLLIMATOR	MCOAD02		380.37258	80.60037	104.69969	0.04956	-0.0046	-0.0049						
COLLIMATOR CAVE SWEEPER MAGNET 1	MSWAD01		376.78388	80.60035	104.69957	-0.00029	0.0043	0.0066						
COLLIMATOR CAVE SWEEPER MAGNET 2	MSWAD02		381.13934	80.60001	104.70003	-0.00773	0.0203	-0.0054						
POLARIMETER			383.06255	80.60001	104.69965	0.01490	0.0003	0.0152						
PHOTON BEAM HARP	HDPBHA		385.23073	80.60004	104.69998	-0.01261	-0.0226	0.0075	5270	10002	16845	20638	24431	
PAIR SPECTROMETER MAGNET	HDPRSP		386.76745	80.59980	104.69981	0.00570	-0.0112	0.0009						
RIGHT HIGH GRANULARITY DETECTOR	HGDETR		389.69587	80.36113	104.70181	-4.67570	-0.0014	0.0175						
LEFT HIGH GRANULARITY DETECTOR	HGDETL		389.69578	80.83810	104.70182	4.67970	-0.0278	0.0072						
RIGHT LOW GRANULARITY DET USBL	LGDETR		390.18365	80.32538	104.70237	-4.70670	-0.0705	0.0573						
LEFT LOW GRANULARITY DET USBR	LGDETL		390.18358	80.87461	104.70077	4.67420	0.0504	-0.0811						
SOLENOID (GEOMETRIC CENTER)	HDSOL_		400.02858	80.59985	104.69988	0.01995	0.00968	0.0043						
Solenoid US steel face			397.63062	80.59901	104.69947									
Solenoid DS steel face			402.42654	80.60068	104.70028									
BARREL CALORIMETER (Sept 2013)	HDBCAL		400.25650	80.60103	104.69902	0.01633	0.0424	0.0046						
HYDROGEN TARGET	HTAR		398.77146	80.59982	104.69998	-0.00760	-0.0038							
Scattering chamber DS window			398.96999	80.60122	104.70129									
START COUNTER US FACE US FLANGE	HDSTRT		398.42151	80.60005	104.70129	0.08915	-0.14039	-11.2500						
START COUNTER US FACE SCINTILLATOR			398.50881	80.60005	104.70129									
START COUNTER DS FACESCINTILLATOR			399.09456	80.60110	104.69963									
FDC Package 1 center			399.96114	80.59910	104.70033	0.01633	-0.0493	0.0882						
FDC Package 2 center			400.54684	80.59931	104.69994	0.02263	-0.0352	0.0089						
FDC Package 3 center			401.13273	80.60001	104.69968	0.02922	-0.0682	0.0295						
FDC Package 4 center			401.51948	80.60018	104.70023	-0.00172	0.1097	0.0066						
CENTRAL DRIFT CHAMBER (active center)	HD_CDC		399.05979	80.60003	104.69968	0.00115	-0.01834	0.04550						
CDC projected US active area			398.30922	80.60001	104.69992									
CDC projected DS active area			399.80887	80.60004	104.69944									
FORWARD CALORIMETER	HDFCAL		404.38768	80.60529	104.69998	-0.07019	0.0418	-0.0149						
TIME OF FLIGHT	HDFTOF		404.19655	80.60308	104.70225	0.04612	0.0427	-0.1813						
Hall D 0,0 point			398.13862	80.6	104.7									

Items resurveyed since spring 2015 run include; Target, PS low gran and PS high gran, Start Counter, Goniometer, Radiator, Tagger Magnet, Microscope, Polarimeter, primary and secondary collimator and scattering chamber

iber. All others are the same as before. Also, the tagger quad magnet was added as well as the tagger dipole pole entrance location.